Market Survey cum Detailed Techno Economic Feasibility Report

on

Sodium Hypochlorite

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General

Ηψδεραβαδ ισ α□διστριχτ□ιν τηε στατε οφ□Τελανγανα□ιν Ινδια τηατ χονταινσ α παρτ οφ τηε μετροπολιταν αρεα οφ□Ηψδεραβαδ. Ιτ ισ τεαδεδ βψ α διστριχτ χολλεχτορ ωηο ισ δραων φρομ τηε□ΙΑΣ□χαδρε ανδ ισ απποιντεδ βψ τηε□στατε γοϖερνμεντ.

Ηψδεραβαδ διστριχτ ωασ φορμεδ ιν 1948 αφτερ□Πολιχε Αχτιον□βψ μεργινγ□Ατραφ–α–Βαλδα
Διστριχτ□ανδ Βαγηατ Διστριχτ. Βαγηατ ωασ πρεϖιουσλψ α Ταλυκ ιν Ατραφ–ε–Βαλδα Διστριχτ, ανδ ωασ μαδε α σεπαρατε διστριχτ ιν 1931–34 υνδερ τηε συβεδαρ οφ Μεδακ διϖισιον. Ιν 1978 Ηψδεραβαδ διστριχτ ωασ λατερ σπλιτ ιντο Ηψδεραβαδ Υρβαν Διστριχτ ανδ Ηψδεραβαδ Ρυραλ Διστριχτ. Ηψδεραβαδ ρυραλ διστριχτ ωασ λατερ ρενamεδ ασ□Ρανγα Ρεδδψ Διστριχτ.□Ηψδεραβαδ Υρβαν διστριχτ ισ νοω κνοων ασ Ηψδεραβαδ διστριχτ.□Ηψδεραβαδ 6.81 μιλλιον Αχχορδινγ το 2011 χενσυσ. Τηε αρεα 650□κμ.

Location & Geographical Area

Τηε διστριχτ ισ λοχατεδ ατ 17ο 22□ Ν λατιτυδε ανδ 78ο 27□ Ε λονγιτυδε. Ιτ ισ συρρουνδεδ ον αλλ σιδεσ βψ Ρανγα Ρεδδψ διστριχτ. Τηε τοταλ γεογραπηιχ αρεα οφ τηε διστριχτ ισ 217 Σθ. κμσ. Τηε ρυραλ αρεασ οφ ερστωηιλε Ηψδεραβαδ διστριχτ νοω βελονγ το Ρανγα Ρεδδψ διστριχτ, ωηιχη οφφερσ τηε χαπιταλ χιτψ α γρεατ σχοπε φορ εξπανσιον ον αλλ σιδεσ.

Physical Characteristics

Τηε λατιτυδε ανδ λονγιτυδε οφ Ηψδεραβαδ χαν βε προφεχτεδ ασ 17° 22ə 31∀ Ν ανδ 78° 28ə 27∀ Ε. Τηε χιτψ ισ νεστλεδ ον τηε Δεχχαν Πλατεαυ ανδ ισ ποσιτιονεδ ατ α ηειγητ οφ αρουνδ 500 μετερσ φρομ τηε σεα λεϖελ.

Rainfall

Ραινσ βρουγητ βψ τηε σουτη−ωεστ συμμερ μονσοον λασηη Ηψδεραβαδ βετωεεν Θυνε αν δ Σεπτεμβερ, συππλψινγ ιτ ωιτη μοστ οφ ιτσ αννυαλ ραινφαλλ οφ 812.5 μμ (32 ιν). Τηε ηιγηεστ μ οντηλψ ραινφαλλ τοταλ, 181.5 μμ (7 ιν), οχχυρσ ιν Σεπτεμβερ. Τηε χιτψ ρεχειϖεσ 2,731 ηουρσ ο φ συνσηινε περ ψεαρ, ωιτη μαξιμυμ δαιλψ συνλιγητ εξποσυρε οχχυρρινγ ιν Φεβρυαρψ.

Climate

Ηψδεραβαδ ηασ α□τροπιχαλ ωετ ανδ δρψ χλιματε□(Κ⟩ππεν□Αω) βορδερινγ ον α ηοτ□σεμι−αριδ χλιματε. Τηε αννυαλ μεαν τεμπερατυρε ισ 26.6°Χ (79.9°Φ); μοντηλψ μεαν τεμπερατυρεσ αρε 21 □ 33°Χ (70□ 91°Φ)Συμμερσ (Μαρχη□ Θυνε) αρε ηοτ ανδ ηυμιδ, ωιτη αϖεραγε ηιγησ ιν τηε μιδ−τ ο−ηιγη 30σ Χελσιυσ; μαξιμυμ τεμπερατυρεσ οφτεν εξχεεδ 40°Χ (104°Φ) βετωεεν Απριλ ανδ Θυνε .[47]□Τηε χοολεστ τεμπερατυρεσ οχχυρ ιν Δεχεμβερ ανδ Θανυαρψ, ωηεν τηε λοωεστ τεμπερατυ ρε οχχασιοναλλψ διπσ το 10°Χ (50°Φ).□Μαψ ισ τηε ηοττεστ μοντη, ωηεν δαιλψ τεμπερατυρεσ ρ ανγε φρομ 26 το 39°Χ (79□ 102°Φ); Δεχεμβερ, τηε χολδεστ, ηασ τεμπερατυρεσ ϖαρψινγ φρομ 14.5 το 28°Χ (57□ 82°Φ).

Administration

Αχχορδινγ το τηε□Ανδηρα Πραδεση Ρεοργανισατιον Αχτ, 2014□παρτ 2 Σεχτιον 5:∀(1) Ον ανδ φρομ τηε απποιντεδ δαψ, Ηψδεραβαδ ιν τηε εξιστινγ Στατε ο φ□Ανδηρα Πραδεση, σηαλλ βε τηε χομμον χαπιταλ οφ τηε Στατε οφ□Τελανγανα□ανδ τηε Στατε οφ Ανδηρ α Πραδεση φορ συχη περιοδ νοτ εξχεεδινγ τεν ψεαρσ. (2) Αφτερ εξπιρψ οφ τηε περιοδ ρεφερρεδ τ ο ιν συβ−σεχτιον (1), Ηψδεραβαδ σηαλλ βε τηε χαπιταλ οφ τηε Στατε οφ Τελανγανα ανδ τηερε σηαλλ βε α νεω χαπιταλ φορ τηε Στατε οφ Ανδηρα Πραδεση.∀

Τηε σαμε σεχτιονσ αλσο δεφινε τηατ τηε χομμον χαπιταλ ινχλυδεσ τηε εξιστινγ αρεα δε σιγνατεδ ασ τηε Γρεατερ Ηψδεραβαδ Μυνιχιπαλ Χορπορατιον υνδερ τηε Ηψδεραβαδ Μυνιχιπα λ Χορπορατιον Αχτ, 1955. Ασ στιπυλατεδ ιν σεχτιονσ 3 ανδ 18(1) οφ τηε Ρεοργανισατιον Αχτ, χι τψ ΜΛΑσ αρε μεμβερσ οφ Τελανγανα στατε ασσεμβλψ.

Map

Demographics

Ωηεν τηε ΓΗΜΧ ωασ χρεατεδ ιν 2007, τηε αρεα οχχυπιεδ βψ τηε μυνιχιπαλιτψ ινχρεασεδ φρομ 175□ κμ2□(68□ σθ□ μι) το 650□ κμ2□(250□ σθ□ μι). Χονσεθυεντλψ, τηε ποπυλατιον ινχρεασεδ βψ 87%, φρομ 3,637,483 ιν τηε 2001 χενσυσ το 6,809,970 ιν τηε 2011 χενσυσ, 24% οφ ωηιχη αρε μιγραντσ φρομ ελσεωηερε ιν Ινδια,□μακινγ Ηψδεραβαδ τηε νατιονэσ□φουρτη μοστ ποπυλουσ χιτψ. Ασ οφ 2011, τηε ποπυλατιον δενσιτψ ισ 18, 480/κμ2□(47,900/σθ□ μι).□Ατ τηε σαμε 2011 χενσυσ, τηε Ηψδεραβαδ Υρβαν Αγγλομερατιον ηαδ α ποπυλατιον οφ 7,749,334, μακινγ ιτ τηε σιξτη μοστ ποπυλουσ υρβαν αγγλομερατιον□ιν τηε χουντρψ.□Τηε ποπυλατιον οφ τηε Ηψδεραβαδ υρβαν αγγλομερατιον ηασ σινχε βεεν εστιματεδ βψ ελεχτοραλ οφφιχιαλσ το βε 9.1 μιλλιον ασ οφ εαρλψ 2013 βυτ ισ εξπεχτεδ το εξχεεδ 10 μιλλιον βψ τηε ενδ οφ τηε ψεαρ.□Τηερε αρε 3,500,802 μαλε ανδ 3,309,168 φεμαλε χιτιζενσ□α□σεξ ρατιο□οφ 945 φεμαλεσ περ 1000 μαλεσ,□ηιγηερ τηαν τηε νατιοναλ αωεραγε οφ 926 περ 1000. Αμονγ χηιλδρεν αγεδ□ 0□ 6ψεαρσ, 373,794 αρε βοψσ ανδ 352,022 αρε γιρλσ□ α ρατιο οφ 942 περ 1000.□Λιτεραχψ στανδσ ατ 82.96% (μαλε 85.96%; φεμαλε 79.79%), ηιγηερ τηαν τηε νατιοναλ αωερ αγε οφ 74.04%.□Τηε σοχιο−εχονομιχ στρατα χονσιστ οφ 20%□υππερ χλασσ, 50%□μιδδλε χλασσ□ανδ 30% ωορκινγ χλασσ.

Economy

Ηψδεραβαδ ισ τηε λαργεστ χοντριβυτορ το τηε□γροσσ δομεστιχ προδυχτ□(ΓΔΠ), ταξ ανδ οτηερ ρεωενυεσ, οφ Τελανγανα, ανδ τηε σιξτη λαργεστ δεποσιτ χεντρε ανδ φουρτη λαργεστ χρεδιτ χεντρε νατιονωιδε, ασ ρανκεδ βψ τηε□Ρεσερωε Βανκ οφ Ινδια□(PBI) ιν 9υνε 2012.□Ιτσ ΥΣΞ74□ βιλλιον ΓΔΠ μαδε ιτ τηε φιφτη−λαργεστ χοντριβυτορ χιτψ το Ινδιαэσ οωεραλλ ΓΔΠ ιν 2011□ 12.□Ιτσ περ χαπιτα αννυαλ ινχομε ιν 2011 ωασ Ρσ. 44,300□(ΥΣΞ660).□Ασ οφ 2006, τηε λαργεστ εμπλοψερσ ιν τηε χιτψ ωερε τηε γοωερνμεντσ οφ Ανδηρα Πραδεση (113,098 εμπλοψεεσ) ανδ Ινδια (85,155). Αχχορδινγ το α 2005 συρωεψ, 77% οφ μαλεσ ανδ 19% οφ φεμαλεσ ιν τηε χιτψ ωερε εμπλοψεδ.□Τηε□ινδυστρψ ρεμαινσ δομινανт ιν τηε χιτψ, ανδ 90% οφ τηε εμπλοψεδ ωορκφορχε ισ ενγαγεδ ιν τηισ σεχτορ.

Ηψδεραβαδ ισ δεχιδεδλψ ονε οφ Ινδια□ σ μοστ ιμπορταντ εχονομιχ ηυβσ, ωιτη μαρκεδ γ ροωτη ιν τηε αυτομοβιλε ανδ αυτο παρτσ ινδυστρψ, πουλτρψ φαρμινγ, τεξτιλεσ ανδ αππαρελ ιν δυστρψ, ανδ βυλκ δρυγσ ανδ πηαρμαχευτιχαλσ. Μορε τηαν τηεσε, ηοωεϖερ, Ηψδεραβαδ ισ αλ σο φαστ βεχομινγ α μαφορ ΙΤ χιτψ ιν Ινδια.

Δυε το ιτσ ωιδε εχονομιχ γροωτη, Ηψδεραβαδ ισ τηε εχονομιχ ανδ φινανχιαλ χαπιταλ ο φ τηε στατε οφ Ανδηρα Πραδεση, ανδ ιτ ισ τηε στατε□ σ λαργεστ χοντριβυτορ το τηε γροσσ δομε στιχ προδυχτ (ΓΔΠ) ασ ωελλ ασ στατε ταξ ανδ εξχισε ρεϖενυεσ. Οϖερ τηε λαστ δεχαδε, Ηψδερ αβαδ ηασ ποστεδ δραματιχ γροωτησ ανδ ιτ ισ εξπεχτεδ τηατ ιτ ωιλλ χοντινυε το γροω ιν τηε φο λλοωινγ ψεαρσ. Σινχε τηε 90σ, ιτσ εχονομιχ παττερν ηασ χηανγεδ φρομ βεινγ πριμαριλψ σερϖι χε−οριεντεδ το ονε ωιτη α βροαδερ ανδ μορε διϖερσιφιεδ σπεχτρυμ, ινχλυδινγ τρανσπορτ, χομμ ερχε, ανδ χομμυνιχατιονσ.

Ιν τηε χραφτσ ινδυστρψ, Ηψδεραβαδ ισ κνοων ασ τηε χιτψ οφ πεαρλσ. Ιτ προδυχ εσ βανγλεσ, σιλϖερωαρε, σαρισ, παιντινγσ ανδ αρτιφαχτσ, υνιθυε ηανδχραφτεδ ιτεμσ συχη ασ Βιδρι ωαρεσ, σιλκωαρε, χοττονωαρε, ανδ χλοτηινγ ματεριαλσ τηατ ηαϖε βεεν τραδεδ τηρουγη τηε χιτψ φορ χεντυριεσ νοω.

Τηε ρεταιλ ινδυστρψ ηασ αλσο σεεν α μαρκεδ ραισε δυε το τηε γροωινγ ιντερνατιοναλ ανδ νατιοναλ βρανδσ τηατ ηαϖε σετ υπ ρεταιλ στορεσ ιν τηε χιτψ. Μυλτιπλε χεντραλ βυσινεσ σ διστριχτσ ηαϖε βεεν χονστρυχτεδ ωιτη τηε μαφορ βυσινεσσ ανδ χομμερχιαλ διστριχτσ βεινγ σετ υπ ιν τηε□Αβιδσ−Κοτηι−Ναμπαλλψ αρεασ, τηε Κυκατπαλλψ−Χηανδαναγαρ−ΒΗΕΛ αρεασ, ανδ τηε Βανφαρα Ηιλλσ−ϑυβιλεε Ηιλλσ−Κοτηαγυδα αρεασ, αμονγ οτηερσ. Ιν φαχτ, φορ τηε αδ ϖανχεμεντ οφ χιτψ ινφραστρυχτυρε, α σκψσχραπερ βυσινεσσ διστριχτ ατ Μανχηιρεϖυλα ισ βε ινγ βυιλτ βψ τηε γοϖερνμεντ. Υπον ιτσ χομπλετιον, τηε ΑΠΙΙΧ Τοωερ βυιλδινγ ατ ιτσ χεντερ μα ψ βεχομε τηε ταλλεστ βυιλδινγ ιν Ινδια.

Περηαπσ οφ μορε ιμπορτανχε, ηοωεϖερ, ισ Ηψδεραβαδ□ σ εμεργινγ φυτυρε ασ ον ε οφ Ινδια□ σ χεντραλ Ινφορματιον Τεχηνολογψ ανδ ΙΤ εναβλεδ σερϖιχε ηυβσ. Το δατε, μανψ σ οφτωαρε, βυσινεσσ προχεσσ ουτσουρχινγ (ΒΠΟ), ασ ωελλ ασ χαλλ χεντερ φιρμσ ηαϖε τακεν υ π οφφιχε ιν Ηψδεραβαδ. Τηε χιτψ ηασ βεχομε ηομε το Αμεριχαν ΙΤ γιαντσ συχη ασ ΙΒΜ, Δελλ, Οραχλε, ανδ Γενεραλ Ελεχτριχ.

Ηψδεραβαδ ηασ αλσο βεχομε τηε φορεμοστ δεστινατιον φορ Μιχροσοφτ Δεωελοπμεντ Χ εντερ ιν Ινδια. Τηε δεωελοπμεντ οφ ΗΙΤΕΧ Χιτψ, α τοωνσηιπ πρεππεδ ωιτη στατε οφ τηε αρτ τεχ ηνολογιεσ ανδ φαχιλιτιεσ, αλσο ηελπεδ προμπτ σεωεραλ ΙΤ ανδ ΙΤΕΣ χομπανιεσ το σετ υπ οπερ ατιονσ ιν τηε χιτψ. Μορε τηαν τηατ, τηεσε χομπανιεσ ηαωε χομε το Ηψδεραβαδ φορ τωο σιμπλ ε ρεασονσ: ονε, Ινδια ηασ α ηυγε ιντελλεχτυαλ ταλεντ ανδ τηεσε αρε βεινγ υτλιζεδ βψ τηεσε χο μπανιεσ ιν ορδερ το μαινταιν τηειρ γλοβαλ χομπετιτιωενεσσ.

Τηε σεχονδ ρεασον ισ μορε λονγ τερμ: τηε λοχαλ μαρκετ. Ινδια αλσο προωιδεσ χηεαπ λ αβουρ χοστσ, α ρελαξεδ ωορκινγ ενωιρονμεντ, ανδ φαωοραβλε λαβουρ στανδαρδσ. Αλλ τηεσε χομβινε το φυελ Ηψδεραβαδ σ πλαχε ασ Ινδια σ πρεμιερε ΙΤ χιτψ. Ιν φαχτ, συχη δεωελοπμεντ σ ηαωε προμπτεδ χιωιχ βοοστερσ το χαλλ Ηψδεραβαδ ασ Χψβεραβαδ.

Σηορτλψ, αρεασ οφ Ινδυστριαλ Γροωτη ιν Ηψδεραβαδ

Αυτομοβιλε ανδ Αυτο Χομπονεντσ Ινδυστρψ

ΙΤ Ινδυστρψ

Τεξτιλεσ ανδ Αππαρελσ

Σπιχεσ

Πουλτρψ Φαρμινγ

Βυλκ Δρυγσ ανδ Πηαρμαχευτιχαλσ

Τουρισμ ανδ Εντερταινμεντ Ινδυστρψ

Φοοδ & Αγρο Προχεσσινγ Εξχεπτ Τραδιτιοναλ Ινδυστριεσ

Πετρολευμ, Πετρο−χηεμιχαλσ

Χηεμιχαλσ & Φερτιλιζερσ

Μινεραλ βασεδ Ινδυστριεσ

Βιοτεχηνολογψ

Ενεργψ Σαϖινγ Δεϖιχεσ, Αππλιανχεσ, ετχ.

Culture and Attitudes

Ιν μανψ σενσεσ, Ηψδεραβαδ ισ τηε μεετινγ γρουνδ βετωεεν Νορτη ανδ Σουτη Ινδια. Τηε χιτψ ηασ α χυλτυρε τηατ ισ διστινχτ φρομ τηε ρεστ οφ Ανδηρα Πραδεση, σηοωινγ Ισλαμιχ ινφλ υενχεσ ανδ α χουρτλψ πρεσενχε ιμπαρτεδ φρομ ιτσ περιοδ ασ τηε χαπιταλ οφ τηε Νιζαματε. Τη ισ ισ μορε εϖιδεντ ιν τηε ολδ χιτψ. Τηε νεω χιτψ ρεσεμβλεσ μανψ προϖινχιαλ στατε χαπιταλσ ι ν Ινδια. Σεχυνδεραβαδ ισ μορε χοσμοπολιταν, ασ τηε Χαντονμεντ αρεα ισ λοχατεδ ιν τηισ παρ τ οφ τηε χιτψ.

Δυε το α ρεχεντ ινφλυξ οφ ψουνγ μεν ανδ ωομεν φρομ ϖαριουσ παρτσ οφ τηε χουντρψ, Η ψδεραβαδǝσ χυλτυρε ανδ αττιτυδεσ ηαϖε τακεν α τυρν τοωαρδσ ∀μοδερνιτψ∀. Ηοωεϖερ, ιτ ισ γοοδ το κεεπ ιν μινδ τηατ τηε χιτψ ισ στιλλ α δεεπλψ χονσερϖατιϖε πλαχε ανδ το δρεσσ αππρο πριατελψ, εσπεχιαλλψ ιν τηε ολδ χιτψ.

Transport

Τηε μοστ χομμονλψ υσεδ φορμσ οφ μεδιυμ διστανχε τρανσπορτ ιν Ηψδεραβαδ ινχλυδε γ οϖερνμεντ οωνεδ σερϖιχεσ συχη ασ λιγητ ραιλωαψσ ανδ βυσεσ, ασ ωελλ ασ πριϖατελψ οπερα τεδ ταξισ ανδ αυτο ριχκσηαωσ. Βυσ σερϖιχεσ οπερατε φρομ τηε Μαηατμα Γανδηι Βυσ Στατιον ιν τηε χιτψ χεντρε ανδ χαρρψ οϖερ 130 μιλλιον πασσενγερσ δαιλψ αχροσσ τηε εντιρε νετωορκ. Ηψδεραβαδǝσ λιγητ ραιλ τρανσπορτατιον σψστεμ, τηε Μυλτι–Μοδαλ Τρανσπορτ Σψστεμ
(ΜΜΤΣ), ισ α τηρεε λινε συβυρβαν ραιλ σερϖιχε υσεδ βψ οϖερ 160,000 πασσενγερσ δαιλψ. Χομ πλεμεντινγ τηεσε γοϖερνμεντ σερϖιχεσ αρε μινιβυσ ρουτεσ οπερατεδ βψ Σετ
ωιν Ιντερχιτψ ραιλ σερϖιχεσ αλσο οπερατε φρομ Ηψδεραβαδ; τηε μαιν, ανδ λαργεστ, στατιον ι σ Σεχυνδεραβαδ Ραιλωαψ Στατιον, ωηιχη σερϖεσ ασ Ινδιαν Ραιλωαψσǝ Σουτη Χεντραλ Ραιλωαψ

ζονε□ηεαδθυαρτερσ ανδ α ηυβ φορ βοτη βυσεσ ανδ ΜΜΤΣ λιγητ ραιλ σερϖιχεσ χοννεχτινγ Σεχ υνδεραβαδ ανδ Ηψδεραβαδ. Οτηερ μαφορ ραιλωαψ στατιονσ ιν Ηψδεραβαδ αρε□Ηψδεραβαδ Δεχχαν Στατιον,□Καχηιγυδα Ραιλωαψ Στατιον, Βεγυμπετ Ραιλωαψ Στατιον,□Μαλκαφγιρι Ραιλωαψ Στατιον ανδ Λινγαμπαλλψ Ραιλωαψ Στατιον.□Τηε□Ηψδεραβαδ Μετρο, α νεω□ραπιδ τρανσιτ σψστεμ, ισ το βε αδδεδ το τηε εξιστινγ πυβλιχ τρανσπορτ ινφραστρυχτυρε ανδ ισ σχηεδυλεδ το οπερατε τηρεε λινεσ βψ 2015.

Ασ οφ 2012, τηερε αρε οϖερ 3.5 μιλλιον ϖεηιχλεσ οπερατινγ ιν τηε χιτψ, οφ ωηιχη 74% α ρε τωο−ωηεελερσ, 15% χαρσ ανδ 3% τηρεε−ωηεελερσ. Τηε ρεμαινινγ 8% ινχλυδε βυσεσ, γοοδσ ϖεηιχλεσ ανδ ταξισ. Τηε λαργε νυμβερ οφ ϖεηιχλεσ χουπλεδ ωιτη ρελατιϖελψ λοω ροαδ χοϖερ αγε□ ροαδσ οχχυπψ ονλψ 9.5% οφ τηε τοταλ χιτψ αρεα□ ηασ λεδ το ωιδεσπρεαδ τραφφιχ χονγεστιον εσπεχιαλλψ σινχε 80% οφ πασσενγερσ ανδ 60% οφ φρειγητ αρε τρανσπορτεδ βψ ροαδ.□Τηε Ιννερ Ρινγ Ροαδ, τηε□Ουτερ Ρινγ Ροαδ, τηε□Ηψδεραβαδ Ελεϖατεδ Εξπρεσσωαψ, τηε λονγεστ φλψοϖερ ιν Ινδια, ανδ ϖαριουσ□ιντερχηανγεσ, οϖερπασσεσ ανδ υνδ ερπασσεσ ωερε βυιλτ το εασε τηε χονγεστιον.

Introduction

Sodium hypochlorite (NaClO) is the active constituent in chlorine bleach, a strong oxidizer and bleaching agent. Increases in household bleach demand are driven mostly by population growth. In turn, population growth and its corresponding increases in water consumption coupled with limited fresh water resources makes water treatment the largest application for bleach, as well as the fastest-growing segment of bleach use. Sodium hypochlorite chemical production is a well-established process in the industry, and the principle behind its operation is also employed for preventing chlorine emissions in chlor-alkali plants. The chemical process relies on the acquisition of chlorine and caustic soda (sodium hydroxide; NaOH) feedstock from external sources, in contrast with the electrochemical process for bleach, which also involves brine electrolysis. The chlorination of caustic soda to sodium hypochlorite is an exothermic reaction. Sodium hypochlorite (NaOCl) is a compound that can be effectively used for water purification. It is used on a large scale for surface purification, bleaching, odor removal and water disinfection.

Bleach (Sodium hypochlorite) is a chemical compound derived from natural sources used to whiten fabrics. Bleach works by the process of oxidation, or the alteration of a compound by the introduction of oxygen molecules. A stain is essentially a chemical compound, and the addition of bleach breaks down the molecules into smaller elements so that it separates from the fabric. Detergent and the agitation of the washing machine speed up the cleaning process. The disinfecting properties of bleach work in the same manner germs are broken down and rendered harmless by the introduction of oxygen. In industry, different forms of bleach are used to whiten materials such as paper and wood, though most bleach is used to launder textiles.

History

Humans have been whitening fabrics for centuries; ancient Egyptians, Greeks, and Romans bleached materials. As early as 300 B.C., soda ash, prepared from burned seaweed, was used to clean and whiten cloth. During the middle ages, the Dutch perfected the bleaching of fabrics in a process called crofting, whereby fabrics were spread out in large fields for maximum sunlight exposure. Textile mills as far away as Scotland shipped their material to the Netherlands for this bleaching. The practice quickly spread throughout Europe, and bleaching fields were documented in Great Britain as early as 1322. In 1728 a bleaching company using Dutch methods went into business in Galloway, Scotland. In this process, the fabrics were soaked in a lye solution for several days, then "bucked," or washed clean. The fabrics were then spread out on the grass for weeks at a time. This process was repeated five or six times until the desired whiteness was achieved. Next, the fabric was treated with sour milk or buttermilk, and again bucked and crofted. This method was lengthy and tedious, and it monopolized large tracts of land that could have been used for farming.

Late in the 18th century, scientists discovered a chemical that had the same effect as crofting, but yielded much quicker results. Iν 1774, Σωεδισηη χηεμισт Καρλ Ωιληελμ Σχηεελε δισχοωερεδ τηε χηεμιχαλ ελεμεντ χη λορινε, α ηιγηλψ ιρριτατινγ, γρεεν–ψελλοωισηη γασεουσ ηαλογεν. Iν 1785, τηε Φρενχη σχιεντιστ Χλαυδε Βερτηολλετ φουνδ τηατ χηλορινε ωασ αν εξχελλεντ ωηιτενινγ αγεντ ιν φαβριχσ. Σομε μιλλ οπερατορσ αττεμπτεδ το εξποσε τηειρ φαβριχσ το χηλορινε γασ, βυτ τηε προχεσσ ωασ σο χυμβερσομε ανδ τηε φυμεσ σο στρονγ τηατ τηεσε αττεμπτσ ωερε σοον αβανδονεδ.

Νεαρ Παρισ, ιν τηε τοων οφ Θαωελ, Βερτηολλετ βεγαν α σμαλλ φαχιλιτψ φορ τηε μανυφ αχτυρε οφ α νεω προδυχτ χαλλεδ ∀Εαυ δε Θαωελλε.∀ Τηε βλεαχηινγ ποωδερ χονσιστεδ οφ ποτ αση (σοδα αση) ωηιχη ηαδ αβσορβεδ χηλορινε γασ. Iν 1799, ανοτηερ βλεαχηινγ ποωδερ ωασ ιν ωεντεδ βψ Σχοττισηη χηεμισт Χηαρλεσ Τενναντ. Iν τηε εαρλψ ψεαρσ οφ τηε Ινδυστριαλ Ρεωολυ τιον, ηισ πατεντεδ λιμε ποωδερ ωασ ωιδελψ υσεδ το ωηιτεν α ωαριετψ οφ φαβριχσ ανδ παπερ π ροδυχτσ. Το μακε τηε βλεαχηινγ ποωδερ, σλακεδ λιμε (λιμε τρεατεδ ωιτη ωατερ) ωασ σπρεαδ τ ηινλψ οωερ τηε χονχρετε ορ λεαδ φλοορ οφ α λαργε ροομ.

Χηλορινε γασ ωασ πυμπεδ ιντο τηε ροομ το βε αβσορβεδ βψ τηε λιμε. Τηουγη αν εφφεχτι ϖε ωηιτενερ, τηε ποωδερ ωασ χηεμιχαλλψ υνσταβλε. Ιτ ωασ χομμονλψ υσεδ υντιλ αρουνδ Ωορ λδ Ωαρ Ι, ωηεν λιθυιδ χηλορινε ανδ σοδιυμ ηψποχηλοριτε σολυτιονσ τηε φορερυννερσ οφ μοδε ρν ηουσεηολδ βλεαχη ωερε ιντροδυχεδ. Αβουτ τηισ τιμε, ρεσεαρχηερσ φουνδ τηατ ινφεχτινγ□σ αλτ□ωατερ ωιτη ελεχτριχαλ χυρρεντ βροκε δοων τηε σαλτ (σοδιυμ χηλοριδε) μολεχυλεσ ανδ π ροδυχεδ α χομπουνδ χαλλεδ σοδιυμ ηψποχηλοριτε. Τηισ δισχοϖερψ εναβλεδ τηε μασσ προδυχ τιον οφ σοδιυμ ηψποχηλοριτε, ορ χηλορινε, βλεαχη.

Properties

ºPt ●¹‰⁵⁄₈¹⁄₈ᵛT‰¹⁄₃ᶜR ⁷⁄₈¹ᶜRNºᵛT‰¹⁄₃ ’ ○¹⁄₃■—‰

½Pt ‡ᴺL €ᴸF ᵛT—ᴸFᴺL¹⁄₃²⁄₃‰⁵⁄₈ €– ¹⁄₃€ᶜR ᵛT—‰⁵⁄₈ᴸFᴸF NºЀ₦⁵⁄₈³⁄₈ ₩€ᴺL℗ –¹³⁄₈€ᵛTNº †Rs³⁄₈ᶜR¹₦€³⁄₈⁵⁄₈Pt

¼Pt ‡ᴺL €ᴸF ᴸFᴺLᶜR¹—Ⓜ ■₦€³⁄₈€ᴹᴰ€—Ⓜ ¹⁄₃Ⓜ⁵⁄₈–ᴺL£ ᵛTᴸFᵛT¹⁄₃‰‰Rs ᴸFᴺL¹ᶜR⁵⁄₈³⁄₈ ¹⁄₃–³⁄₈ ᵛTᴸF⁵⁄₈³⁄₈ €– ᴸF¹‰ᵛTᴺL€¹—Pt

¢Pt ‡ᴺL €ᴸF ³⁄₈€ᴸF¹⁄₃ⓂᶜR⁵⁄₈⁵⁄₈¹⁄₃²⁄₃‰⁵⁄₈£ –₩⁵⁄₈⁵⁄₈ᴺL€ᴸF℗ ¹³⁄₈¹ᶜR ¹⁄₃–³⁄₈ ■¹⁄₃‰⁵⁄₈ ⓂᶜR⁵⁄₈⁵⁄₈–€ᴸF℗ ¹⁄₈¹‰¹ᶜRPt

²Pt ‡ᴺL €ᴸF ᴸF¹‰ᵛT²⁄₃‰⁵⁄₈ €– ¹⁄₈¹‰³⁄₈ ₩¹⁄₃ᴺL⁵⁄₈ᶜRPt

ⁿPt ‡ᴺL €ᴸF ³⁄₈⁵⁄₈¹⁄₈¹NºᴴT¹ᴸF⁵⁄₈³⁄₈ ²⁄₃Rs ℗¹ᴺL ₩¹⁄₃ᴺL⁵⁄₈ᶜRPt

℗Pt ‡ᴺL €ᴸF ᴺL¹₦€¹⁄₈ ²⁄₃Rs €–Ⓜ⁵⁄₈ᴸFᴺL€¹— ¹⁄₃–³⁄₈ €–℗¹⁄₃‰¹⁄₃ᴺL€¹—Pt

©Pt ‡ᴺL €ᴸF ᴸFᴺLᶜR¹—Ⓜ €ᶜRᶜR€ᴺL¹⁄₃—ᴺL ᴺL¹ ᴺL€ᴸFᴸFᵛT⁵⁄₈Pt

¤Pt ff℗⁵⁄₈ᶜR⁵⁄₈ €ᴸF ⁷⁄₈€ᶜR⁵⁄₈ ᶜR€ᴸFᶜu €– ¹⁄₈¹–ᴺL¹⁄₃¹⁄₈ᴺL ₩€ᴺL℗ ¹ᶜRⓂ¹⁄₃–€¹⁄₈ Nº¹⁄₃ᴺL⁵⁄₈ᶜR€¹⁄₃‰Pt

Sodium Hypochlorite

ff℗⁵⁄₈ ℗RsᴴT¹¹⁄₈℗‰¹ᶜR€ᴺL⁵⁄₈ᴸF£ ¹—⁵⁄₈ ¹⁷⁄₈ ᴺL℗⁵⁄₈ ᴸFᴺLᶜR¹—Ⓜ⁵⁄₈ᴸFᴺL ¹⁄₈‰¹⁄₃ᴸFᴸF⁵⁄₈ᴸF ¹⁷⁄₈ ²⁄₃‰⁵⁄₈¹⁄₃¹⁄₈℗€—Ⓜ ¹⁄₃Ⓜ⁵⁄₈–ᴺLᴸF ᶜu—¹₩–£ ¹⁄₃ᶜR⁵⁄₈ ᵛTᴸF⁵⁄₈³⁄₈ €– ‰¹⁄₃ᵛT—³⁄₈⁵⁄₈ᶜR€—Ⓜ ¹⁄₃–³⁄₈ ⁷⁄₈¹ᶜR ᴴTᵛT‰ᴴT ¹⁄₃–³⁄₈ ᴺL⁵⁄₈₦ᴺL€‰⁵⁄₈ ²⁄₃‰⁵⁄₈¹⁄₃¹⁄₈℗€—℗Pt —¹NºN⁵⁄₈ᶜR¹⁄₈€¹⁄₃‰ ²⁄₃‰⁵⁄₈¹⁄₃¹⁄₈℗€—Ⓜ ᴸF¹‰ᵛTᴺL€¹—ᴸF ¹⁄₃ᶜR⁵⁄₈ ᴴTᶜR⁵⁄₈ᴴT¹⁄₃ᶜR⁵⁄₈³⁄₈ ²⁄₃Rs ᴴT¹⁄₃ᴸFᴸF€—Ⓜ ¹⁄₈℗‰¹ᶜR€–⁵⁄₈ Ⓜ¹⁄₃ᴸF ᴺL℗ᶜR¹ᵛTⓂ℗ ¹⁄₈¹⁄₃ᵛTᴸFᴺL€¹⁄₈ ᴸF¹³⁄₈¹⁄₃ ᴸF¹‰ᵛTᴺL€¹—ᴸF ¹⁄₈¹—ᴺL¹⁄₃€—€——Ⓜ ‰⁵⁄₈ᴸFᴸF ᴺL℗¹⁄₃— ½ªPt²⁎ ᴸF¹³⁄₈€ᵛTNº ℗Rs³⁄₈ᶜR¹₦€³⁄₈⁵⁄₈Pt

—‰₀.₅ » ½○¹⁄₃■† ⟶ ○¹⁄₃■—‰ » ○¹⁄₃—‰ » †₀.₅■

–¹³⁄₈€ᵛᵀNº ⅛℗‰¹ᶜᴿ€³⁄₈⅝ €ᴸᶠ ᴸᶠ⅓‰ᴺᴸ⅝³⁄₈ ¹ᵛᵀᴺᴸ €⅞ ⅛⅓ᵛᵀᴸᶠᴺᴸ€⅛ ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹–ᴸᶠ ⅓²⁄₃¹❂⅝ ½ªPt²⁎ ⅓ᶜᴿ⅝ ⅛¹Nºᴴᵀ⁰‰⅝ᴺᴸ⅝⁰‰Rs ⅛℗‰¹ᶜᴿ€–⅓ᴺᴸ⅝³⁄₈ ⅓⅛¹ᶜᴿ³⁄₈€–℠ ᴺᴸ¹ ⅝ᶠᵛᵀ⅓ᴺᴸ€¹–Pt ○¹ᶜᴿ ᴴᵀᶜᴿ⅓⅛ᴺᴸ€⅛⅓‰ ᴴᵀᵛᵀᶜᴿᴴᵀ¹ᴸᶠ⅝ᴸᶠ£ ᴸᶠᴺᴸᶜᴿ¹–℠ ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹–ᴸᶠ ⅛¹–ᴺᴸ⅓€–€–℠ ⅓ᴺᴸ Nº¹ᴸᶠᴺᴸ º²⁎ ⅓❂⅓€‰⅓²⁄₃⁰‰⅝ ⅛℗‰¹ᶜᴿ€–⅝ ⅓ᶜᴿ⅝ ᵛᵀᴸᶠ⅝³⁄₈ ⅞¹ᶜᴿ €–³⁄₈ᵛᵀᴸᶠᴺᴸᶜᴿ€⅓‰ ²⁄₃⁰‰⅝⅛⅓⅛℗€–℠Pt ff℗⅝ᴸᶠ⅝ ⅓ᶜᴿ⅝ ³⁄₈€‰ᵛᵀᴺᴸ⅝³⁄₈ ᴺᴸ¹ ²Pt½²⁎ ᴸᶠ¹³⁄₈€ᵛᵀNº ℗Rsᴴᵀ¹¹⅛℗‰¹ᶜᴿ€ᴺᴸ⅝ ⅛¹–ᴺᴸ⅝–ᴺᴸ ⅞¹ᶜᴿ ℗¹ᵛᵀᴸᶠ⅝℗¹⁰‰³⁄₈ ᵛᵀᴸᶠ⅝Pt

ff℗⅝ ᴸᶠNº⅓‰‰ ⅓Nº¹ᵛᵀ–ᴺᴸ ¹⁷⁄₈ ⅞ᶜᴿ⅝⅝ ⅛⅓ᵛᵀᴸᶠᴺᴸ€⅛ ᴸᶠ¹³⁄₈⅓ ᴴᵀᶜᴿ⅝ᴸᶠ⅝–ᴺᴸ €–ᴸᶠᴺᴸᶜᴿ¹–℠ ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹–ᴸᶠ ⅓⅛ᴺᴸᴸᶠ ⅓ᴸᶠ ⅓ ᴸᶠᴺᴸ⅓²⁄₃€⁰‰€ᴹᴰ⅝ᶜᴿPt ff¹ ⅞ᵛᵀᶜᴿᴺᴸ℗⅝ᶜᴿ ⅝–℗⅓–⅛⅝ ᴸᶠᴺᴸ⅓²⁄₃€⁰‰€ᴺᴸRs℠ ᴺᴸ℗⅝ ⅛⅓ᵛᵀᴸᶠᴺᴸ€⅛ ᵛᵀᴸᶠ⅝⅜ €– ᴺᴸ℗⅝ ᴴᵀᶜᴿ⅝ᴴᵀ⅓ᶜᴿ⅓ᴺᴸ€¹– ¹⁷⁄₈ ᴺᴸ℗⅝ᴸᶠ⅝ ²⁄₃‰⅝⅛⅓⅛℗ ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹–ᴸᶠ ᴸᶠ℗¹ᵛᵀ⁰‰³⁄₈ –¹ᴺᴸ ⅛¹–ᴺᴸ⅓€– ℗⅝⅛⅓❂Rs Nº⅝ᴺᴸ⅓‰ᴸᶠ ⅓–⅜ ᴺᴸ℗⅝ ℗Rsᴴᵀ¹¹⅛℗‰¹ᶜᴿ€ᴺᴸ⅝ ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹– ᴸᶠ℗¹ᵛᵀ⁰‰³⁄₈ ²⁄₃⅝ ᴸᶠᴺᴸ¹ᶜᴿ⅝³⁄₈ €– ³⁄₈⅓ᶜᴿᶜu ¹ᶜᴿ ᴴᵀ¹⁰‰Rs⅝ᴺᴸ℗Rs⁰‰⅝–⅝ ²⁄₃¹ᴺᴸᴺᴸ⁰‰⅝ᴸᶠ ⅓ᴺᴸ ᴺᴸ⅝Nºᴴᵀ⅝ᶜᴿ⅓ᴺᴸᵛᵀᶜᴿ⅝ᴸᶠ ²⁄₃⅝⁰‰¹₩ ¼ª°—Pt –€℠–€⅞€⅛⅓–ᴺᴸ ³⁄₈⅝⅛¹Nºᴴᵀ¹ᴸᶠ€ᴺᴸ€¹– ¹⁷⁄₈ ᴺᴸ℗⅝ ᴺᴸRsᴴᵀ⅝ ᴸᶠ℗¹₩– ¹¹⅛⅛ᵛᵀᶜᴿᴸᶠ ⅓²⁄₃¹❂⅝ ¢ª°—Pt

½○¹⅓■—‰ » †■—‰ ○¹⅓—‰■¼ » †—‰ » ○¹⅓—‰

ff℗⅝ ᴸᶠ¹⁰‰ᵛᵀ²⁄₃€⁰‰€ᴺᴸRs ¹⁷⁄₈ ᴸᶠ¹³⁄₈€ᵛᵀNº †Rsᴴᵀ¹¹⅛℗‰¹ᶜᴿ€ᴺᴸ⅝ €– ₩⅓ᴺᴸ⅝ᶜᴿ ⅓ᴺᴸ ½²°— €ᴸᶠ ¢²⁎Pt

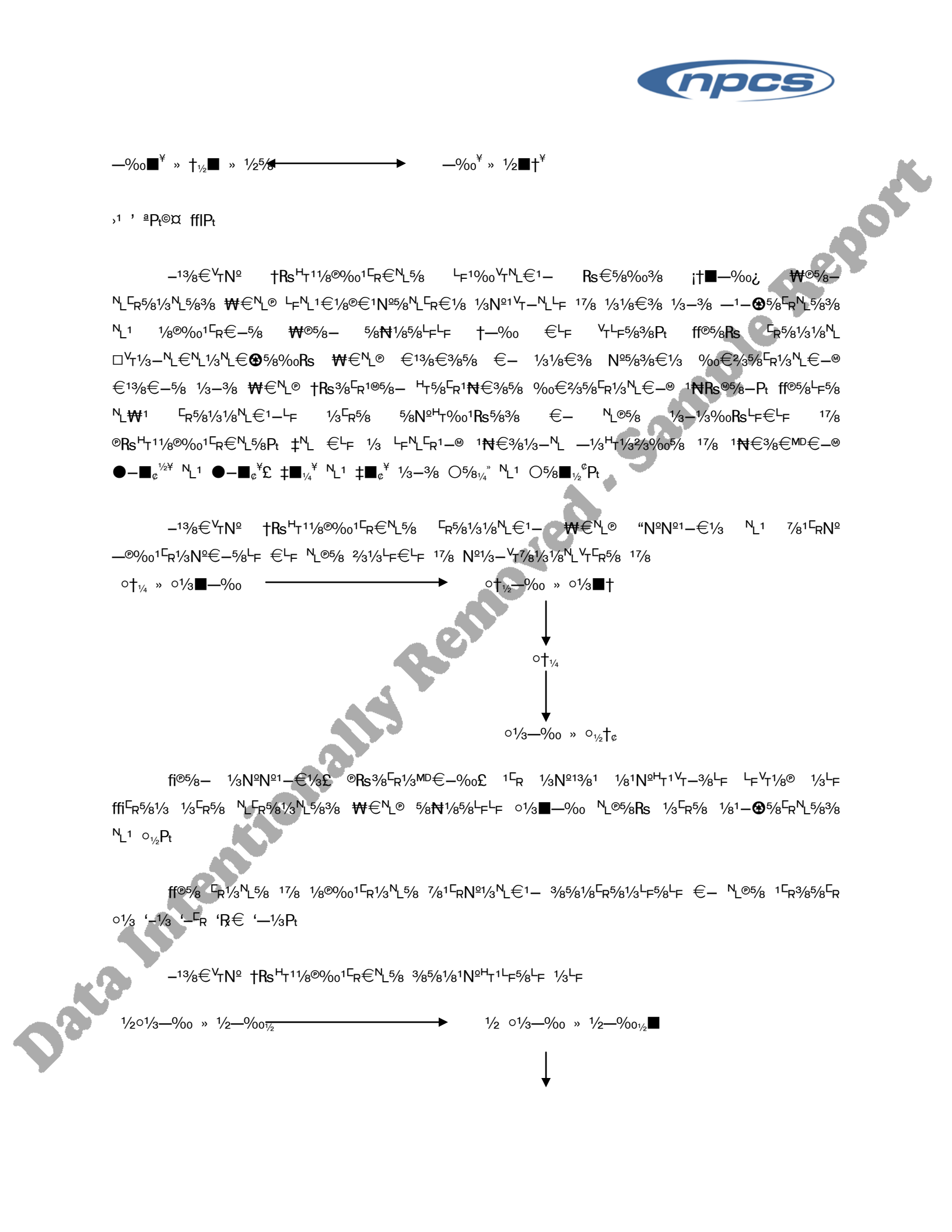
ff℗⅝ ffi‰ᴺᴸᶜᴿ⅓❂€¹⁰‰⅝ᴺᴸ ⅓²⁄₃ᴸᶠ¹ᶜᴿᴴᵀᴺᴸ€¹– ᴸᶠᴴᵀ⅝⅛ᴺᴸᶜᴿᵛᵀNº ¹⁷⁄₈ ℗Rsᴴᵀ¹¹⅛℗‰¹ᶜᴿ€ᴺᴸ⅝ €¹– ᴸᶠ℗¹₩ᴸᶠ ⅓ Nº¹⅓₦€NºᵛᵀNº ⅓ᴺᴸ ½¤½ –Nº ₩€ᴺᴸ℗ ⅓ Nº¹⁰‰⅓ᶜᴿ ⅓²⁄₃ᴸᶠ¹ᶜᴿᴴᵀᴺᴸ€❂⅝ ¹⁷⁄₈ ¼²ª ⅛Nº¥°Pt

†⅝⅓ᴺᴸᴸᶠ ¹⁷⁄₈ ⅞¹ᶜᴿNº⅓ᴺᴸ€¹– †° ℠™ƒNº¹⁰‰ ¡℠ ⅛⅓‰ƒNº¹⁰‰¿ ¹⁷⁄₈ –¹³⁄₈€ᵛᵀNº †Rsᴴᵀ¹¹⅛℗‰¹ᶜᴿ€ᴺᴸ⅝ €ᴸᶠ ¥ ¼¢ⁿPtª

¡¥©½Pt®¿ ⅓–⅜ ⅞¹ᶜᴿ ○¹⅓■—‰ ¡⅓ᶠᶠ¿

¥¼ª¢Ptª ¡¥®½Ptⁿ²¿Pt

ff℗⅝ ᶜᴿ⅝⅜ᵛᵀ⅛ᴺᴸ€¹– ᴴᵀ¹ᴺᴸ⅝–ᴺᴸ€⅓‰ ¹⁷⁄₈ —‰■¥ €– ²⁄₃⅓ᴸᶠ€⅛ ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹– €ᴸᶠ³



○⅓■—‰

↓

½ ○⅓—‰ » ○⅓—‰■¼

“‰ᴺL℗¹ⱽT㎷℗ †Rsᴴт¹⅛℗‰¹ᶜR€ᴺL⅝ –¹‰ⱽTᴺL€¹– ⅓ᶜR⅝ Nºⱽт⅛℗ Nº¹ᶜR⅝ ᴸFᴺL⅓⅔‰⅝ ᴺL℗⅓– †■—‰£ ff℗⅝Rs ⅓ᶜR⅝ ᴸFⱽT⅔℅⅝⅛ᴺL ᴺL¹ ⅜⅝⅛¹NºᴴT¹ᴸF€ᴺL€¹– ₩℗€⅛℗ €ᴸF €–⅞‰ⱽT⅝–⅛⅝⅜ ⅔Rs ⅛¹–⅛⅝–ᴺLᶜR⅓ᴺL€¹– €¹–€⅛ ᴸFᴺLᶜR⅝–㎷ᴺL℗£ ᴴT†£ ᴺL⅝NºᴴT⅝ᶜR⅓ᴺL ⱽTᶜR⅝⅛£ ‰€㎷℗ᴺL ⅓–⅜ €NºᴴTⱽTᶜR€ᴺL€⅝⅛ᴸF ‹⅝⅛¹NºᴴT¹ᴸF€ᴺL€¹– ¹⅛⅛ⱽTᶜRᴸF €– ᴺL₩¹ ₩⅓RsᴸF₧

½○⅓■—‰ ⟶ ½○⅓—‰ » ■½

½○⅓■—‰ —SM₂⟶ ○⅓—‰ » ○⅓—‰■½ —SM½ ○⅓■—‰⟶ ½○⅓—‰ » ○⅓—‰■¼

Uses and Applications

The principal name laundry bleach product in USA is liquid chlorine bleach, Sodium Hypo chlorite. Most washing in USA is carried out at temperature range of 40-60°C and under these conditions, chlorine bleaches have high bleaching efficiency and high germicidal properties. Liquid chlorine bleaches are sold as an alkaline solution containing 5.6% Sodium Hypo chlorite and are generally used at an available chlorine level of 200 PPM in wash. However chlorine bleaches are not safe to use for all fabrics laundered. Some wash and wear fabrics, some synthetic fabrics are attacked by the bleaches.

Ηιστοριχαλλψ, Σοδιυμ Ηψπο χηλοριτε ορ Χηεμιχ φιρστ ωασ υσεδ ιν τηε τεξτιλε ινδυστρ ψ το βλεαχη λινεν. Ωηεν χοττον χαμε ιντο ωιδε υσε, ιτ τοο ωασ βλεαχηεδ βψ ηψποχηλοριτε. Το δαψ ηψποχηλοριτε ισ στιλλ υσεδ φορ σομε βλεαχηινγ ιν τηε ΥΣΑ, βυτ ιτ ισ υσεδ μορε εξτενσιω ελψ ιν Ευροπε. Ιν α χοντινυουσ προχεσσ αβουτ 2.5 – 5 γμ/λιτ οφ αωαιλαβλε χηλορινε ισ υσεδ φ ορ αβουτ 0.25 – 0.5 η ατ 40 □ 50□Χ. Τηε ηψποχηλοριτε τρεατμεντ ισ φολλοωεδ βψ αν αντιχηλο ρ τρεατμεντ (Σοδιυμ Βισυλφιτε, Συλφυρ διοξιδε, ορ ηψδρογεν περοξιδε) το πρεωεντ χολορ ρεωερ σιον (φορματιον οφ χηλοραμινεσ). Ηψποχηλοριτε βλεαχηινγ γιωεσ α ηιγηερ ωηιτε βυτ νεεδσ μυ χη χλοσερ χοντρολ.

Λιθυιδ βλεαχη, χαλλεδ σοδα βλεαχη λιθυορ ιν τηε παπερ ανδ τεξτιλε ινδυστριεσ, ισ τηε μοστ ωιδελψ υσεδ οφ αλλ χηλορινατεδ βλεαχηεσ. Οωερ 150 τονσ οφ αωαιλαβλε χηλορινε ασ λι θυιδ βλεαχη ισ υσεδ ιν τηε Υνιτεδ Στατεσ εωερψ δαψ φορ ηουσεηολδ ανδ λαυνδρψ βεαχηινγ. Ο τηερ υσεσ ινχλυδε χηεμιχαλ προχεσσινγ (ε.γ. χηλορηψδρινατιον), τεξτιλε βλεαχηινγ, ωατερ τρε ατμεντ ανδ γενεραλ δισινφεχτινγ.

Χομμερχιαλ λιθυιδ βλεαχη υσυαλλψ χονταινσ 12 το 15 περχεντ αωαιλαβλε χηλορινε. Ιτ ισ σολδ ιν χαρβοψσ ανδ ιν ρυββερ–λινεδ δρυμσ ανδ χρυχκσ. Λιθυιδ βλεαχη σολυτιον οφ 3 το 5 □ περχεντ αωαιλαβλε χηλορινε, τηε μαφοριτψ οφ τηε ηουσεηολδ βλεαχη τραδε, ισ παχκαγεδ ιν βροων ορ αμβερ γλασσ βοττλεσ φορ ηουσεηολδ, λαυνδρψ ανδ σανιτιζινγ υσε. Τηε ρεχεντ τρεν δ ηερε ισ τοωαρδ τηε 5 ορ 5□ περχεντ προδυχτ.

Τηε σταβιλιτψ οφ ηψποχηλοριτε σολυτιονσ ισ γρεατλψ αφφεχτεδ βψ ηεατ, λιγητ, πΗ ανδ τηε πρεσενχε οφ ηεαϖψ μεταλ χατιονσ. Γρεατεστ σταβιλιτψ ισ ατταινεδ ωιτη α πΗ χλοσε το 11 ανδ ωιτη τηε αβσενχε οφ ηεαϖψ μεταλ χατιονσ. Στορινγ ιν α χολορεδ βοττλε, ασ οπποσεδ το α χλεαρ βοττλε, ωιλλ ινχρεασε τηε ηαλφ–λιφε σιξ φολδ. Στοραγε τεμπερατυρεσ σηουλδ νοτ εξχεεδ 85□Φ, αβοϖε ωηιχη τηε ρατε οφ δεχομποσιτιον (ωηιχη νεαρλψ δουβλεσ ωιτη εαχη 10□□Φ ινχρεασε ιν τεμπερατυρε) βεχομεσ τοο ηιγη ανδ τηε αϖαιλαβλε χηλορινε χοντεντ ισ ραπιδλψ δεπλετεδ.

Οτηερ υσεσ οφ Σοδιυμ Ηψπο χηλοριτε (ΝαΟχλ) ισ ασ βλεαχηινγ αγεντ ιν παπερ πυλπ, ανδ τεξτιλε ινδυστριεσ. Ιτ ισ υσεδ ιν ωατερ πυριφιχατιον. Ιτ ισ υσεδ ασ φυνγιχιδε. Ιτ ισ υσεδ ασ λαβορατορψ Ρεαγεντ. Ιτ ισ αλσο υσεδ ιν μεδιχινεσ.

Characteristics

Σοδιυμ ηψποχηλοριτε ισ α χλεαρ, σλιγητλψ ψελλοωισηση σολυτιον ωιτη α χηαραχτεριστι χ οδορ. Σοδιυμ ηψποχηλοριτε ηασ α ρελατιϖε δενσιτψ οφ ισ 1,1 (5,5% ωατερψ σολυτιον).
Ασ α βλεαχηινγ αγεντ φορ δομεστιχ υσε ιτ υσυαλλψ χονταινσ 5% σοδιυμ ηψποχηλοριτε (ωιτη α□πΗ□οφ αρουνδ 11, ιτ ισ ιρριτατινγ). Ιφ ιτ ισ μορε χονχεντρατεδ, ιτ χονταινσ α χονχεντρατιον 10–15% σοδιυμ ηψποχηλοριτε (ωιτη α πΗ οφ αρουνδ 13, ιτ βυρνσ ανδ ισ χορροσιϖε). Σοδιυμ η ψποχηλοριτε ισ υνσταβλε. Χηλορινε εϖαπορατεσ ατ α ρατε οφ 0.75 γραμ αχτιϖε χηλορινε περ δ αψ φρομ τηε σολυτιον. Τηεν ηεατεδ σοδιυμ ηψποχηλοριτε δισιντεγρατεσ. Τηισ αλσο ηαππενσ ωηεν σοδιυμ ηψποχηλοριτε χομεσ ιν χονταχτ ωιτη αχιδσ, συνλιγητ, χερταιν μεταλσ ανδ ποισο νουσ ανδ χορροσιϖε γασσεσ, ινχλυδινγ χηλορινε γασ. Σοδιυμ ηψποχηλοριτε ισ α στρονγ οξιδα τορ ανδ ρεαχτσ ωιτη φλαμμαβλε χομπουνδσ ανδ ρεδυχτορσ. Σοδιυμ ηψποχηλοριτε σολυτιον ισ α ωεακ βασε τηατ ισ ινφλαμμαβλε.
Τηεσε χηαραχτεριστιχσ μυστ βε κεπτ ιν μινδ δυρινγ τρανσπορτ, στοραγε ανδ υσε οφ σοδιυμ ηψ ποχηλοριτε.

Product Description

Σοδιυμ Ηψποχηλοριτε ισ α χορροσιωε λιθυιδ χηεμιχαλ ωιτη α χηεμιχαλ φορμυλα ΝαΧλΟ ανδ αωεραγε μολεχυλαρ ωειγητ οφ 74.44 γραμσ περ μολ. Τηισ γρεενισηψελλοω χηεμιστρψ φορμυλατιον ηασ α χηλορινε λικε ανδ σωεετισηοδορ ωιτη α δενσιτψ οφ 1.11 γραμσ περ χυβιχ χεντιμετερσ. Ιτ χαν βε υσεδ ασ αν αγροχηεμιχαλ βαχτεριχιδεσ το κιλλ βαχτερια ιν φιελδσ, ωατερ τρεατμεντ, δισινφεχταντ ανδ ωαριουσ οτηερ αππλιχατιονσ.

Σπεχιφιχατιον

Πυριτψ	100%
ΧΑΣ Νο.	7681–52–9
Φορμ	Λιθυιδ
Αππλιχατιονσ	Ωατερ Τρεατμεντ, Επιδεμιχ Χοντρολ, Τεξτιλε Μιλλσ, Δισινφεχταντ, Παπερ Ινδυστρψ, Λαυνδρψ
Χηεμιχαλ Φορμυλα	ΝαΟΧλ
Δενσιτψ	1.11 γ/χμ3
Μελτινγ Ποιντ	18 °Χ
Βοιλινγ Ποιντ	101 °Χ

Σταβιλιτψ & Στοραγε

Βλεαχη σηουλδ βε στορεδ βετωεεν 2–8□Χ (50–70□Φ). Υνδιλυτεδ ηουσεηολδ βλεαχη ηασ α σηελφ λιφε οφ σιξ μοντησ το ονε ψεαρ φρομ τηε δατε οφ μανυφαχτυρε, αφτερ ωηιχη βλεαχη δεγραδεσ ατ α ρατε οφ 20% εαχη ψεαρ υντιλ τοταλλψ δεγραδεδ το σαλτ ανδ ωατερ, ανδ α 1:10 βλεαχη σολυτιον ηασ α σηελφ λιφε οφ 24 ηουρσ. Βλεαχη μυστ βε στορεδ σεπαρατελψ φρομ χορροσιωεσ, σοαπσ, δετεργεντσ ορ οτηερ χλεανινγ προδυχτσ.

Γραδεσ

Τηε φολλοωινγ ταβλε σηοωσ σομε οφ τηε ωαρψινγ στρενγτησ οφ τηε προδυχτ ανδ ηοω τ ηε ωαριατιονσ αρε τψπιχαλλψ υσεδ:

Ωτ % οφ Σοδιυμ Ηψποχηλοριτε	Χομμον Υσεσ
2 %	Σηοχκ Χηλορινατιον οφ Ωελλσ
3–6 %	Ηουσεηολδ Δισινφεχταντ, Λαυνδρινγ Χλοτηεσ, Δεντιστρψ Ροοτ Χαναλ Τρεατμεντ Δισινφεχτεντ ιν Ηοσπιταλσ, Φοοδ Προχεσσινγ, Φιση Προχεσσινγ ετχ.
12–16 %	Δισινφεχταντ ιν Σωιμμινγ Ποολσ, Ωατερ Τρεατμεντ, Ωαστε Ωατερ Τρεατμεντ ετχ.

Παχκαγινγ

50 Λτρσ ιν ΗΔΠΕ Ροχκετ Χαρβοψσ.

B.I.S. Specifications

ΙΣ 11673: 1992 (Ρεαφφιρμεδ Ψεαρ: 2020) Σοδιυμ Ηψποχηλοριτε Σολυτιον

ΙΣ 984: 1988 (Ρεαφφιρμεδ Ψεαρ: 2017) Μετηοδ φορ Δετερμινατιον οφ Χολουρ Φαστνεσσ οφ Τεξτιλε Ματεριαλσ το Ωασηινγ ιν τηε Πρεσενχε οφ Σοδιυμ Ηψποχηλοριτε

ΙΣ 11673: Παρτ 1: 2019 Σοδιυμ Ηψποχηλοριτε Σολυτιον Σπεχιφιχατιον Παρτ 1 Ηουσεηολδ ανδ Ινδυστριαλ Υσε (Σεχονδ Ρεϖισιον).

ΙΣ 11673: Παρτ 2: 2019 Σοδιυμ Ηψποχηλοριτε Σολυτιον Σπεχιφιχατιον Παρτ 2 Ωατερ Τρεατμεντ Υσε (Σεχονδ Ρεϖισιον).

Φορ φυρτηερ δεταιλ, πλεασε χονταχτ....

Μ/Σ. ΒΥΡΕΑΥ ΟΦ ΙΝΔΙΑΝ ΣΤΑΝΔΑΡΔΣ,

9, ΜΑΝΑΚ ΒΗΑçΑΝ,

Β.Σ. ΖΑΦΑΡ ΜΑΡΓ,

ΝΕΩ ΔΕΛΗΙ– 110 002

Τελ.: (091) (11) 23230131, 23233375, 23239402.

Φαξ: 011–23234062, 23239399

Ε–μαιλ: βισ≅ωσνλ.χομ

Ωεβσιτε: ηττπ://ωωω.βισ.οργ.ιν

Νοτε: Τηε υσε οφ τηε Στανδαρδ Μαρκ ισ γοωερνεδ βψ τηε προωισιονσ οφ τηε Βυρεαυ οφ Ινδιαν Στανδαρδ Αχτ– 1986 ανδ τηε Ρυλεσ ανδ Ρεγυλατιον μαδε τηερε υνδερ. Τηε Στανδαρδ Μαρκ ον π ροδυχτσ χοωερεδ βψ αν Ινδιαν Στανδαρδ χονωεψσ τηε ασσυρανχε τηατ τηεψ ηαωε βεεν προδυ χεδ το χομπλψ ωιτη τηε ρεθυιρεμεντσ οφ τηατ στανδαρδ υνδερ α ωελλ δεφινεδ σψστεμ οφ ινσπε χτιον, τεστινγ ανδ θυαλιτψ χοντρολ ωηιχη ισ δεωισεδ ανδ συπερωισεδ βψ ΒΙΣ ανδ οπερατεδ βψ τηε προδυχερ. Στανδαρδ μαρκεδ προδυχτσ αρε αλσο χοντινυουσλψ χηεχκεδ βψ Β.Ι.Σ. φορ χονφ ορμιτψ το τηατ στανδαρδ ασ α φυρτηερ σαφεγυαρδ. Δεταιλσ οφ χονδιτιονσ υνδερ ωηιχη α λιχε νχε φορ τηε υσε οφ τηε Στανδαρδ Μαρκ μαψ βε γραντεδ το μανυφαχτυρερσ ορ προδυχερσ μαψ βε οβταινεδ φρομ τηε Βυρεαυ οφ Ινδιαν Στανδαρδσ.

Market Survey

Sodium hypochlorite, also known as liquid bleach, is made up of a sodium cation and a hypochlorite anion. It is a highly reactive, volatile, pale greenish-yellow aqueous solution, which is used as a household chemical for a prolonged time. Sodium hypochlorite is recognized as a highly effective bleaching agent, sterilizer, germicide, oxidant, and disinfectant. Chlorine gas and caustic soda are combined to produce sodium hypochlorite on a big scale. It is widely used as an active ingredient in water treatment and cleaning solutions due to its powerful disinfection qualities. Moreover, it acts as a chlorinating chemical that keeps swimming pools and drinking water safe, and is used as a significant component in the creation of cleaning solutions for veterinary, food processing, and odor elimination purposes. It is used as a bleaching agent in the paper & pulp and textile industries.

Οωινγ το ραπιδ υρβανιζατιον ανδ ινδυστριαλιζατιον, παρτιχυλαρλψ ιν τηε εμεργινγ νατ ιονσ συχη ασ Χηινα ανδ Ινδια, τηε δεμανδ φρομ τηε ωαστεωατερ χηεμιχαλ τρεατμεντ ινδυστρ ψ ηασ βεεν ωιτνεσσεδ το ινχρεασε σιγνιφιχαντλψ, ωηιχη νοταβλψ χοντριβυτεσ τοωαρδ τηε γρο ωτη οφ τηε□σοδιυμ ηψποχηλοριτε μαρκετ. Ιν τηε χομινγ ψεαρσ, τηε σοδιυμ ηψποχηλοριτε μαρ κετ ισ λικελψ το βε βοοστεδ βψ εξπονεντιαλλψ εξπανδινγ βλεαχη δεμανδ φρομ τηε τεξτιλεσ ανδ πυλπ & παπερ ινδυστριεσ. Δυρινγ τηε περιοδ, συργε ιν δεμανδ φορ σοδιυμ ηψποχηλοριτε ιν τηε μεδιχαλ ινδυστρψ φορ δισινφεχτινγ συργιχαλ ινστρυμεντσ ανδ ηοσπιταλ ροομσ ισ εξπεχτεδ το βοοστ τηε σοδιυμ ηψποχηλοριτε μαρκετ. Φυρτηερμορε, ρισε ιν αωαρενεσσ αβουτ τηε νεεδ φορ ρεγυλαρ ανδ προπερ δισινφεχτιον οφ οφφιχε σπαχεσ, πυβλιχ ρεστροομσ, μαλλσ, ανδ χομπλεξεσ ισ φυελινγ δεμανδ φορ σοδιυμ ηψποχηλοριτε, τηυσ προπελλινγ τηε μαρκετ γροωτη. Ηοωεϖερ, η αζαρδουσ νατυρε οφ σοδιυμ ηψποχηλοριτε μαψ ηινδερ τηε σοδιυμ ηψποχηλοριτε μαρκετ εξπα νσιον.

Τηε ΧΟϛΙΔ–19 πανδεμιχ ηαδ α σιγνιφιχαντ ιμπαχτ ον ϖαριουσ ινδυστριεσ, ινχλυδινγ με διχινε, παπερ ανδ τεξτιλεσ, ρεσυλτινγ ιν τηε σηυτδοων οφ μανυφαχτυρινγ πλαντσ, α δεχλινε ιν σαλεσ, ανδ α δισρυπτιον ιν τηε συππλψ–δεμανδ χηαιν. Τηισ σαλεσ δισρυπτιον ηασ ιμπαχτεδ π ροδυχτ δεμανδ ανδ χονσυμπτιον, ρεσυλτινγ ιν α σιγνιφιχαντ δροπ ιν μαρκετ γροωτη.

Τηε χονσυμερ βεινγ αδαπτιωε ανδ ρεσπονδινγ το τηε χηαλλενγεσ οφ ΧΟςΙΔ–19 τηατ ρεσ υλτσ ιν χρεατινγ αττραχτιωε χονσυμερ τρενδσ. Ηοωεωερ, τηερε ηασ βεεν ινχρεασεδ ιν σαλε φο ρ σανιτιζερ δυρινγ τηε ΧΟςΙΔ–19 πανδεμιχ ανδ σοδιυμ ηψποχηλοριτε ισ ονε οφ τηε κεψ φεεδ στ οχκσ υσεδ ιν φορμυλατινγ τηεσε ηψγιενε ανδ δισινφεχταντ προδυχτσ βψ χομπανιεσ γλοβαλλψ.

Τηε σοδιυμ ηψποχηλοριτε μαρκετ ισ σεγμεντεδ ον τηε βασισ οφ αππλιχατιον ανδ ρεγιον . Βψ αππλιχατιον, τηε μαρκετ ισ χλασσιφιεδ ιντο βλεαχηινγ & χλεανινγ, οξιδιζινγ, δισινφεχταντ , δεοδοριζινγ, ανδ οτηερσ. Ρεγιον ωισε, τηε σοδιυμ ηψποχηλοριτε μαρκετ ισ στυδιεδ αχροσσ Νο ρτη Αμεριχα, Ευροπε, Ασια–Παχιφιχ, ανδ ΛΑΜΕΑ. Τηε σοδιυμ ηψποχηλοριτε μαρκετ σηαρε ισ αναλψζεδ αχροσσ αλλ σιγνιφιχαντ ρεγιονσ.

Σοδιυμ ηψποχηλοριτε μαρκετ□το συρπασσ ΥΣΔ 205 Μιλλιον, ιν 2020 ανδ ισ εστιματεδ τ ο γροω οωερ 5.5% ΧΑΓΡ βετωεεν 2022 ανδ 2027 οωινγ το ρισινγ υτιλιζατιον ιν ωαστεωατερ τρεα τμεντ, ηουσεηολδ χλεανινγ προδυχτσ, τεξτιλε, χηεμιχαλ ινδυστρψ. Ινχρεασινγ αχχεπτανχε οφ σ οδιυμ ηψποχηλοριτε ασ βλεαχη ανδ δισινφεχταντσ ιν ωατερ τρεατμεντ ανδ ηουσεηολδ ηψγιενε προδυχτσ ισ εξπεχτεδ το προπελ τηε μαρκετ γροωτη.

Τηε χηλορινατιον οφ τηε ινλετ στρεαμ το ωαστεωατερ τρεατμεντ πλαντσ αιμσ το πρεωε ντ σλυδγε φρομ βυλκινγ. Ωηεν υνδεσιραβλε φιλαμεντουσ προτοζοανσ ορ οργανισμσ βεχομε αβ υνδαντ, αχτιωατεδ σλυδγε δοεσ νοτ σεττλε απποπριατελψ ανδ τηυσ ιτ σταρτσ βυλκινγ. Τηισ π ροχεσσ νοτ ονλψ ρεδυχεσ τηε περφορμανχε οφ τηε πλαντ βυτ αλσο προδυχεσ τυρβιδ εφφλυεντ. Τηυσ, αδδιτιον οφ σοδιυμ ηψποχηλοριτε το τηε σεωαγε ηελπσ το ελιμινατε τηε φιλαμεντουσ ορ γανισμσ ωηιχη αρε πριμαριλψ ρεσπονσιβλε φορ βυλκ φορματιον. Τηυσ, τηισ προδυχτ προωιδεσ βεττερ σλυδγε σεττλινγ χηαραχτεριστιχσ. Οωινγ το τηισ φαχτορ ιτ ισ ηιγηλψ υσεδ φορ ωατερ τ ρεατμεντ.

Σοδιυμ Ηψποχηλοριτε ισ ηιγηλψ υσεδ φορ τεξτιλε φινισηινγ φορ λαστ τωο χεντυριεσ. Νο ωαδαψσ, τηε υσε οφ σοδιυμ ηψποχηλοριτε ιν τεξτιλε προχεσσινγ ισ φορ τηε πρεσηρινκινγ οφ ωο ολ. Σοδιυμ ηψποχηλοριτε ηασ βεεν συπερσεδεδ βψ οτηερ συβστανχεσ ιν φορμερ υσεσ συχη ασ ωηιτενινγ οφ χοττον, στονεωασηινγ φεανσ, ανδ δεχολουρατιον οφ δψεδ τεξτιλεσ. Ηοωεωερ, αφτ ερ ιτσ υσε, τηε βλεαχηινγ εφφλυεντ ισ συβμιττεδ φορ α διχηλορινατιον προχεσσ βψ υσινγ συλπ ηιτε, τηυσ τηε φιναλ δισχηαργε ισ φρεε φρομ οξιδιζινγ χηλορινε.

Market Dynamics

Ινχρεασινγ νεεδ φορ ωαστεωατερ τρεατμεντ ισ μαφορλψ προπελλινγ τηε γροωτη οφ τηε γ λοβαλ σοδιυμ ηψποχηλοριτε μαρκετ. Οωινγ το ιτσ αντι–μιχροβιαλ προπερτιεσ, σοδιυμ ηψποχη λοριτε ισ ωιδελψ υσεδ ασ α βιοχιδε ιν ωατερ τρεατμεντσ. Τηε ρισινγ ινδυστριαλιζατιον ανδ υρ βανιζατιον ισ ρεσυλτινγ αν ινχρεασε ιν τηε ινδυστριαλ ωαστε ωατερ προδυχτιον. Τηε ποπυλατ ιον ιν υρβαν αρεασ ισ ινχρεασινγ τρεμενδουσλψ φορ τηε παστ φεω ψεαρσ. Αχχορδινγ το Υνιτεδ Νατιονσ, ιτ ισ προφεχτεδ τηατ 68% οφ τηε γλοβαλ ποπυλατιον ωιλλ λιωε ιν υρβαν αρεασ βψ 20 50. Τηισ ωιλλ ινχρεασε τηε ωαστε ωατερ προδυχτιον, φυρτηερ λεαδινγ το τηε ινχρεασεδ δεμανδ φορ σοδιυμ ηψποχηλοριτε μαρκετ. Φυρτηερμορε, τηε ρεχεντ ουτβρεακ οφ ΧΟςΙΔ–19 αλσο ιμπα χτεδ τηε γροωτη οφ τηε μαρκετ. Ιν ορδερ το ρεδυχε τηε ωιρυσ σπρεαδ, ωαριουσ γοωερνμεντσ αρ ε χονδυχτινγ σανιτιζατιον οφ πυβλιχ σπαχεσ, δισινφεχτινγ στρεετσ ωιτη σοδιυμ ηψποχηλοριτε. Ιν αδδιτιον το τηισ, Μινιστρψ οφ Ηεαλτη ανδ Φαμιλψ Ωελφαρε οφ χουντριεσ συχη ασ Ινδια, θ απαν ανδ οτηερσ αλσο μανδατεδ τηατ πυβλιχ τοιλετσ, οφφιχε σπαχεσ, ρεσιδεντιαλ χομπλεξεσ, ανδ ουτδοορ αρεασ σηουλδ βε δισινφεχτεδ βψ σοδιυμ ηψποχηλοριτε προδυχτσ. Τηισ ισ αλσο ε νωισαγεδ το χρεατε ηυγε μαρκετ οππορτυνιτιεσ ιν τηε χομινγ ψεαρσ.

Market Drivers

High Demand from Water Treatment Chemical Producers to Provide Growth Opportunities

The growing demand for the product from the water treatment chemical industry is positively affecting the market growth. Chlorine is an essential ingredient of disinfectants as it can kill pathogens such as bacteria and fungi. This product is used for the purification and treatment of water & sewage, swimming pools, homes, hospitals, schools, drinking water, and surgical instruments. Moreover, proper and continuous disinfection of public toilets, office spaces, outer areas, public complexes, and malls as a result of improving hygiene practices among consumers has led to the high demand for this product.

Ινχρεασινγ πρεχαυτιονσ τακεν βψ χομπανιεσ δυρινγ μανυφαχτυρινγ προχεσσεσ το προδ υχε ηιγη−θυαλιτψ ανδ υναδυλτερατεδ προδυχτσ το μαινταιν τηε ηψγιενε οφ εμπλοψεεσ ανδ χο νσυμερσ ισ φυρτηερ λεαδινγ το ηιγη προδυχτ χονσυμπτιον.

Αδοπτιον οφ Ηψγιενε ανδ Ηεαλτη Προδυχτσ το Βοοστ Μαρκετ Γροωτη αμιδ ΧΟςΙΔ−19 Ουτβρεα κ

Τηε ΧΟςΙΔ−19 ουτβρεακ ηασ σεϖερελψ αφφεχτεδ σεϖεραλ ινδυστριεσ συχη ασ τεξτιλε, παπερ, ανδ μεδιχαλ, χαυσινγ α τεμποραρψ σηυτδοων οφ μανυφαχτυρινγ πλαντσ, λεαδινγ το α δ ροπ ιν σαλεσ ανδ διστυρβανχε ιν τηε συππλψ−δεμανδ χηαιν. Τηισ δισρυπτιον ιν σαλεσ ηασ αφ φεχτεδ τηε δεμανδ ανδ χονσυμπτιον οφ προδυχτσ, λεαδινγ το α συβσταντιαλ δεχλινε ιν μαρκετ γροωτη. Τηε χονσυμερ βεινγ αδαπτιϖε ανδ ρεσπονδινγ το τηε χηαλλενγεσ οφ ΧΟςΙΔ−19 τηατ ρε συλτσ ιν χρεατινγ αττραχτιϖε χονσυμερ τρενδσ. Τηε πανδεμιχ ηασ λεδ το τηε ραπιδ εξπανσιον οφ τηε χονσυμερ γοοδσ ινδυστρψ δυε το τηε γροωινγ χονχερν αβουτ χλεανλινεσσ, ηεαλτη, ανδ ηψγιενε. Αχχορδινγ το τηε Ηουσεηολδ ανδ Χομμερχιαλ Προδυχτσ Ασσοχιατιον (ΗΧΠΑ), τηε η ομε χαρε προδυχτσ ϖαλυε στοοδ ατ τηε μαρκετ ϖαλυε οφ αρουνδ ΥΣΔ 180 βιλλιον περ αννυμ τ ηατ ινχλυδεσ προδυχτσ συχη ασ δισινφεχταντσ ανδ χλεανερσ φορ χομμερχιαλ ανδ ηομε αππλι χατιονσ. Τηε γροωινγ αωαρενεσσ λεαδσ το τηε ηιγη χονσυμπτιον οφ τηε αφορεμεντιονεδ χλεανι νγ προδυχτσ, ωηιχη ωιλλ φυρτηερ συργε τηε δεμανδ φορ ΝαΟΧλ ανδ λεαδ το μαρκετ γροωτη. Μ ορεοϖερ, τηε γροωινγ δεμανδ φορ προδυχτσ ινχλυδινγ ηανδ σανιτιζερσ δυρινγ τηε πανδεμιχ ισ α φαχτορ συππορτινγ τηε μαρκετ σιζε γροωτη.

Ινχρεασινγ Δεμανδ φορ ΝαΟΧλ φρομ Ηουσεηολδ Προδυχτσ Μανυφαχτυρερσ το Αιδ Γροωτη

Βλεαχη ισ μαφορλψ υτιλιζεδ ιν τηε ηουσεηολδ ινδυστρψ φορ προδυχτσ συχη ασ δετεργ εντσ, συρφαχε χλεανερσ, χλεανινγ προδυχτσ, ηανδ ωασηι, δισινφεχταντσ, ανδ χολορ βλεαχηεσ. Τηε ρισινγ δεμανδ φορ τηεσε προδυχτσ ισ ονε οφ τηε μαφορ φαχτορσ δριϖινγ τηε μαρκετ. Τηε γ ροωινγ χονσχιουσνεσσ τοωαρδσ θυαλιτψ ηουσεηολδ προδυχτσ φορ μαινταινινγ γοοδ ηψγιενε α νδ χλεανλινεσσ ισ ανοτηερ φαχτορ συππορτινγ γροωτη. Μορεοϖερ, τηε υπωαρδ χονσυμπτιον ο φ προδυχτσ συχη ασ σανιτιζερσ ισ συβσταντιαλλψ συππορτινγ τηισ μαρκετ.

Φυρτηερμορε, τηε γροωινγ τρενδ οφ ηομε βλεαχηινγ χλοτηεσ το ενηανχε τηε ουτερ αππε αρανχε ανδ ιμπροϖε ονε□σ φασηιον σενσε ισ αλσο ποσιτιϖελψ αφφεχτινγ τηε μαρκετ. Ατ τηε σ

αμε τιμε, τηε μεδιχαλ ινδυστρψ ηασ σηοων ραπιδ γροωτη δυρινγ τηε πανδεμιχ, τηερεβψ λεαδινγ το τηε ηιγη χονσυμπτιον οφ τηισ προδυχτ φορ δισινφεχτινγ ωιπεσ, ηαρδ συρφαχεσ, ανδ συργιχαλ ινστρυμεντσ. Τηεσε αφορεμεντιονεδ φαχτορσ αρε εξπεχτεδ το ηαωε α στρονγ μαρκετ γροωτη ποτεντιαλ.

Ινχρεασινγ Τρενδ οφ Βλεαχηινγ Χλοτηεσ ατ Ηομε το Ενηανχε Φασηιον Σενσε ωιλλ Αιδ Γροωτη

Τηε ρισινγ τρενδ οφ ηομε βλεαχηινγ χλοτηεσ το ιμπροωε ονε□σ φασηιον σενσε ανδ ενηανχε τηε ουτερ αππεαρανχε ωουλδ αυγμεντ τηε σοδιυμ ηψποχηλοριτε μαρκετ γροωτη ιν τηε νεαρ φυτυρε. Χουπλεδ ωιτη τηισ, τηε ονγοινγ ΧΟϛΙΔ–19 πανδεμιχ ηασ ινχρεασεδ τηε νεεδ φορ δισινφεχτινγ συργιχαλ ινστρυμεντσ, ηαρδ συρφαχεσ, ανδ ωιπεσ το πρεωεντ τρανσμισσιον. Ηοωεωερ, φυμεσ προδυχεδ βψ σοδιυμ ηψποχηλοριτε χαν δαμαγε λυνγσ ανδ χαυσε γασ ποισονινγ, τηερεβψ λιμιτινγ ιτσ δεμανδ.

Trends Influencing the Growth of Sodium Hypochlorite Market

- Τηε δισχηαργε οφ ινδυστριαλ εφφλυεντσ ιντο αθυατιχ βοδιεσ ηασ ρεαχηεδ αν αλλ–τιμε ηιγη, δυε το γροωινγ ινδυστριαλιζατιον ανδ αν εωερ–ινχρεασινγ νυμβερ οφ μανυφαχτυρινγ φαχιλιτιεσ αρουνδ τηε ωορλδ. Ιν τηε χομινγ ψεαρσ, τηισ τρενδ ισ εξπεχτεδ το βοοστ τηε γροωτη οφ σοδιυμ ηψποχηλοριτε μαρκετ.

- Ανοτηερ ιμπορταντ φαχτορ δριωινγ τηε γροωτη οφ τηε σοδιυμ ηψποχηλοριτε μαρκετ ισ τηε ινχρεασεδ δεμανδ φορ δετεργεντσ, συρφαχε χλεανσερσ, χλεανινγ προδυχτσ, ηανδ ωασηη, δισινφεχταντσ, ανδ χολουρ βλεαχηεσ. Ανοτηερ ασπεχτ βοοστινγ γροωτη ισ α γροωινγ αωαρενεσσ οφ τηε ιμπορτανχε οφ υσινγ ηιγη–θυαλιτψ ηουσεηολδ προδυχτσ το μαινταιν γοοδ ηψγιενε ανδ χλεανλινεσσ. Φυρτηερμορε, τηε σοδιυμ ηψποχηλοριτε μαρκετ ισ βεινγ βολστερεδ βψ ρισινγ υσαγε οφ προδυχτσ συχη ασ σανιτιζερσ.

- Δυρινγ τηε πανδεμιχ, τηε μεδιχαλ βυσινεσσ εξπεριενχεδ φαστ εξπανσιον, ρεσυλτινγ ιν α χονσιδεραβλε δεμανδ φορ σοδιυμ ηψποχηλοριτε προδυχτσ φορ δισινφεχτιον ωιπεσ, ηαρδ συρφαχεσ, ανδ συργιχαλ ινστρυμεντσ. Τηεσε αφορεμεντιονεδ ϖαριαβλεσ αρε πρεδιχτεδ το ηαϖε α σιγνιφιχαντ ιμπαχτ ον σοδιυμ ηψποχηλοριτε μαρκετ γροωτη.

- Φυρτηερμορε, τηε σανιτιζερ ινδυστρψ ωασ ονε οφ τηε ιμπορταντ σεχτορσ τηατ σαω μασσιϖε γλοβαλ σαλεσ. Ασ α ρεσυλτ οφ τηε ϖιρυσ σπρεαδ, πεοπλε βεχαμε αχυτελψ αωαρε οφ τηε ιμπορτανχε οφ περσοναλ ηψγιενε, προμπτινγ τηεμ το υσε ηανδ σανιτιζερσ ανδ οτηερ δισινφεχτιον προδυχτσ. Σοδιυμ ηψποχηλοριτε ισ ονε οφ τηε μοστ χομμον φεεδστοχκσ υσεδ ιν τηε φορμυλατιον οφ ηψγιενε ανδ δισινφεχτιον προδυχτσ αρουνδ τηε ωορλδ.

Restraining Factors

Ηαρμφυλ εφφεχτσ οφ προδυχτσ μαψ ηινδερ μαρκετ γροωτη σοδιυμ ηψποχηλοριτε ισ α η αρμφυλ χηεμιχαλ ωηεν ιτ μακεσ ηυμαν χονταχτ. Χονχεντρατεδ σολυτιονσ οφ τηε προδυχτ χαν χαυσε σκιν βυρν, ιρριτατιον, ανδ εψε δαμαγε. Τηισ προδυχτ δεστροψσ ανδ σαπονιφιεσ τηε συβ στανχε, μακινγ σκιν ελαστιχ. Τηε χηλορινε φυμεσ ρελεασεδ ουτ οφ προδυχτσ μαδε φρομ ΝαΟΧ λ μαψ χαυσε γασ ποισονινγ ανδ λυνγ δαμαγε. Τηε ρισκ ασσοχιατεδ ωιτη τηε υσε οφ λιθυιδ βλεα χη μαψ ηινδερ μαρκετ γροωτη. Ιν αδδιτιον, γοϖερνμενταλ ρεγυλατιονσ οϖερ προδυχτ υσαγε δυ ε το τηε αβοϖε−μεντιονεδ ρεασονσ αρε φυρτηερ ηινδερινγ τηε μαρκετ. Μορεοϖερ, τηε αϖαιλαβ ιλιτψ οφ συβστιτυτεσ, ινχλυδινγ χιτριχ αχιδ, χαλχιυμ ηψποχηλοριτε, ανδ λιτηιυμ ηψποχηλοριτ ε, ισ εξπεχτεδ το ρεστριχτ μαρκετ γροωτη

Market Segmentation

The Sodium Hypochlorite market is segmented on the basis of application and end use. On the basis of application, the Sodium Hypochlorite market is segmented into cleaning & disinfection, bleaching, and chemical manufacturing. By end use, the Sodium Hypochlorite market is classified into household and industrial.

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Τηε μαρκετ ισ σεγμεντεδ ιντο 20% Σολυτιον, 10% Σολυτιον, ανδ Οτηερ.

20% Σολυτιον:

Σοδιυμ ηψποχηλοριτε σολυτιον ισ α φορμ οφ βλεαχη τηατ ηασ αν εξτρεμελψ ηιγη χονχ εντρατιον. Τηισ τψπε οφ βλεαχη χαν βε υσεδ φορ χλεανινγ, δισινφεχτινγ, ανδ πυριφψινγ ωατερ, ασ ωελλ ασ ιν βλεαχηινγ παπερ πυλπ το μακε ωηιτε πριντερ ορ πηοτοχοπψ παπερ. 20% Σολυτιο ν μαψ αλσο βε κνοων βψ τηε χηεμιχαλ ναμε σοδιυμ χηλορατε−σοδιυμ ηψδροξιδε σολυτιον.

10% Σολυτιον:

Α σολυτιον τηατ ισ διλυτεδ ωιτη ωατερ ηασ α χονχεντρατιον οφ τεν περχεντ. Τεν περχεντ οφ σολυτιονσ αρε υσεδ φορ χλοτηεσ ωασηινγ, ηαιρ βλεαχηινγ, ανδ ινκσ. Α διλυτε βλεαχη ωιλλ νοτ βε ασ ηαρση ον τηε σκιν ορ εψεσ ωηεν ιτ χονταχτσ τηεμ βεχαυσε ιτ δοεσν□τ ποσε μυχη τηρεατ το ηυμαν τισσυε.

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Τηε μαρκετ ισ σεγμεντεδ ιντο Χηεμιχαλ Υσε, Αγριχυλτυραλ Υσε, Ωατερ Τρεατμεντ, ανδ Οτηερσ

Χηεμιχαλ Υσε:

Σοδιυμ Ηψποχηλοριτε Σολυτιον ισ υσεδ ιν χηεμιχαλ υσε, ινχλυδινγ εξτραχτινγ ρυββερ φρομ λατεξ ανδ ασ α στεριλιζινγ αγεντ.

Αγριχυλτυραλ Υσε:

Σοδιυμ ηψποχηλοριτε ισ πριμαριλψ υσεδ ασ αν αντιμιχροβιαλ αγεντ φορ αγριχυλτυραλ αππλιχατιονσ. Τηε αππλιχατιον οφ σοδιυμ ηψποχηλοριτε ιν αγριχυλτυρε ηελπσ το ινχρεασε χροπ προδυχτιον βψ ρεδυχινγ τηε ρισκ οφ ινφεχτιουσ δισεασεσ ανδ πεστσ συχη ασ ωεεδσ, ινσεχτσ, βαχτερια, φυνγι, ετχ., ωηιχη υλτιματελψ ρεσυλτσ ιν ινχρεασεδ ψιελδ. Ιν αδδιτιον το τηισ, ιτ αχτσ ασ α δισινφεχταντ ανδ αντισεπτιχ αγεντ το μαινταιν χλεανλινεσσ ιν αγριχυλτυραλ ενϖιρονμεντσ.

Ωατερ Τρεατμεντ:

Τηε Σοδιυμ Ηψποχηλοριτε Σολυτιον ισ υσεδ ιν ωατερ τρεατμεντ φορ τηε πυρποσε οφ δισινφεχτινγ ιτ. Τηε προχεσσ, χαλλεδ χηλορινατιον, ινϖολϖεσ αδδινγ σοδιυμ ηψποχηλοριτε το α πoολ ορ ουτδοορ βοδψ οφ ωατερ ανδ χαν βε δονε μανυαλλψ βψ πουρινγ βλεαχη φρομ ονε χοντα νερ ιντο ανοτηερ (ωηιχη σηουλδ ηαϖε ενουγη λιθυιδ το χοϖερ ιτσ συρφαχε αρεα) ορ βψ υσινγ α χηλορινε ινφεχτορ, ωηιχη ισ χοννεχτεδ το τηε ωατερ συππλψ.

On the Basis of Region

Τηε μαρκετ ισ σεγμεντεδ ιντο Νορτη Αμεριχα, Λατιν Αμεριχα, Ευροπε, Ασια Παχιφιχ, ανδ Μιδδ λε Εαστ & Αφριχα.

Τηε Σοδιυμ Ηψποχηλοριτε Σολυτιον μαρκετ ιν Νορτη Αμεριχα ισ εξπεχτεδ το γροω σιγνι φιχαντλψ δυρινγ τηε φορεχαστ περιοδ, οωινγ το φαχτορσ συχη ασ ινχρεασινγ δεμανδ φορ δισιν φεχταντ σολυτιονσ ανδ ηψγιενε προδυχτσ φρομ ενδ–υσερσ λικε χηεμιχαλ χομπανιεσ, ηοσπιταλ σ, φοοδ ινδυστρψ, ετχ., γροωινγ αωαρενεσσ αμονγ χονσυμερσ αβουτ τηε σαφε χονσυμπτιον οφ ωατερ, ανδ στρινγεντ ρεγυλατιονσ ιν τηε ρεγιον. Τηε σοδιυμ ηψποχηλοριτε σολυτιον μαρκετ ιν Λατιν Αμεριχα ισ προφεχτεδ το γροω σιγνιφιχαντλψ δυρινγ τηε φορεχαστ περιοδ, οωινγ το ινχρε ασινγ δεμανδ φορ ωατερ τρεατμεντ ανδ χηεμιχαλ υσε αππλιχατιονσ συχη ασ βλεαχηινγ αγεντσ φρομ πυλπ & παπερ μιλλσ, τεξτιλε ινδυστριεσ, ανδ τηε φοοδ προχεσσινγ ινδυστρψ. Φυρτηερμο ρε, στρινγεντ ενϖιρονμενταλ ρεγυλατιονσ αρε εξπεχτεδ το λιμιτ χηλορινατεδ οργανιχ χομπουν δσ εμισσιονσ τηρουγη τηισ σολυτιονϑσ υσαγε ιν τηεσε σεχτορσ οϖερ τηε νεξτ σεϖεν ψεαρσ.

Sodium Hypochlorite Market

By Product Type

- Technical Grade Sodium Hypochlorite
- Food Grade Sodium Hypochlorite.

By Application

- Chemical Intermediates
- Food
- Home & Personal Care
- Μινεραλ
- Πηαρμαχευτιχαλσ
- Πυλπ & Παπερ
- Τεξτιλε
- Ωατερ Τρεατμεντ.

Key Companies

- AGC Inc.
- Al-Kout Industrial Projects Company KPSC
- BASF SE

- Befar Group Co., Ltd.
- Bondalti Capital, S.A.
- Χοογεε Χηεμιχαλσ Πτψ Λτδ.
- Δινοξ Ηανδελσ–ΓμβΗ
- Δοναυ Χηεμιε ΑΓ
- Θιανγμεν Γυανγψυε Ελεχτροχηεμιχαλ Χο., Λτδ.
- Θιανγσυ Ψανγνονγ Χηεμιχαλ Γρουπ Χο., Λτδ
- Κανεκα Χορπορατιον
- Κεμιρα Οψφ
- Κυρενα Χορπορατιον
- ΛΟΤΤΕ Φινε Χηεμιχαλ Χο., Λτδ.
- Νανκαι Χηεμιχαλ Χο., Λτδ.
- ΝΧΠ Χηλορχηεμ (Πτψ) Λτδ.
- Νιππον Λιγητ Μεταλ Χο., Λτδ.
- Νιππον Σοδα Χο., Λτδ.
- Νουρψον Ηολδινγ Βς (φορμερ Ακζο Νοβελ Ν.ς.)
- Οχχιδενταλ Χηεμιχαλ Χορπορατιον.

Export & Import: All Countries

Export: All Countries

SODIUM HYPOCHLORITES

Unit: KGS

–Pt○¹Pt	—¹ᵛT–ᴺLᶜRRs	ffl⅓‰ᵛT⅝ᴸF €– ¤ᴸFPt ℞⅓⅛ᴸF			□ᵛT–ᴺL€ᴺLRs €– ᴺL®¹ᵛTᴸF⅓–⅜ᴸF		
		½ª½ª¥½ª½º	½ª½º¥½ª½½ ¡“ᴴTᶜR¥™⅓–¿	*□ᶜR¹₩ᴺL℗	½ª½ª¥ ½ª½º	½ª½º¥ ½ª½½ ¡“ᴴTᶜR¥ ™⅓–¿	*□ᶜR¹₩ᴺL℗
ºPt	“○□■℞“	ºPtnº	ªPt½2		ªPt2ª	ªPtª2	
½Pt	–“○□℞“‹–† ▪▫	ªPtn¼	ªPt½©		ªPtºª	ªPtn¢	
¼Pt	–†ffiff“○	ºªPt¢¼	©Pt½½		¼©Ptºn	½©Pt2n	
¢Pt	–ffi▫ffi○‹‡	ªPt®¤			ªPt2ª		
2Pt	—“…●“○ ‡–		ªPt©½			ªPtªª	
nPt	›□…▪ff “ ▫▪		ªPtª¤			ªPtª©	
®Pt	›ff†‡■▪‡“	ºPt22	ºPtº½		ªPt¢ª	2Ptªª	
©Pt	○‡™‡ ‡–	ªPt½½			ªPt2n		
¤Pt	□“–■○	ªPtªº			ªPtªª		
ºªPt	□›▫●“○…	ºPt½¤	ºPtº½		ªPtª¢	ªPtª½	
ººPt	□†“○“	½ºPt¼¼	¢Pt2ª		®2Ptnª	¤Ptªn	
º½Pt	□ffi‡○›“	ªPtº®			ªPt¼ª		
º¼Pt	‡▫“□		ªPt¼¢			ªPtª2	
º¢Pt	—■ff› ‹§ ‡ffl■‡▫›	2Pt¼ª			½Ptªª		
º2Pt	™■▫‹“○	ªPtªº					
ºnPt	℠›○…“	ªPtª½	¼ªPt2½		ªPtª¼	½½©Ptn¼	
º®Pt	℠ffifl“‡ff	¢Pt22			¢ªPtªª		
º©Pt	●“‹“□“——“▫	2Ptnn			©Ptªª		
º¤Pt	●“℞‹‡ffl›–	º©Pt½¼	nºPtº¢		©Ptªª	½®Pt2¼	
½ªPt	●“ffi▫‡ff‡ffi–	2ºPtªn	¢Pt2½		½º2Ptªª	½¼Pt2½	
½ºPt	●…“○●“▫	¼Pt¼¤			½½Ptªª		
½½Pt	●■$“●–‡□ffi›	½¢Ptª¢			2©Ptªª		

½¼Pt	○›■“℞	ºª¢Pt¤©	ºº¼Pt²¢		²¼®Pt½©	²º¤Pt½¼	
½¢Pt	○‡□›▫	ªPt½½			ªPt¼ª		
½²Pt	■●“○	ªPtªº			ªPtªª		
½ⁿPt	■›▫ffi		ªPtª¢				
½®Pt	□“ff“▫	ªPtªº	ªPtª¢		ªPtª½	ªPtªª	
½©Pt	–“ffi‹‡ “▫“–	ªPtªº			ªPtªº		
½¤Pt	–›...—†›℞℞›–		ªPtªª			ªPtªª	
¼ªPt	–‡○□“■■▫›	ªPtª¢			ªPtª¢		
¼ºPt	–■℞■●■○ ‡–	ººPt½½			ⁿPt²ª		
¼½Pt	–▫‡ ℞“○SM“ ‹–▫	ªPtª½			ªPtª½		
¼¼Pt	–ffi‹“○	ªPtª¼			ªPtªº		
¼¢Pt	ff“○$“○‡“ ▫›■	¢½Pt¼¼	½ⁿPtª©		½¼ºPtªª	º½½Pt¢ª	
¼²Pt	ffi□“○‹“	¢Pt¼º	¢Pt©¤		½¢Ptªª	½¼Pt²½	
¼ⁿPt	ffi – “		ºPt¢¤			ªPtª¼	
¼®Pt	ffi$–›SM‡–ff“○	ªPtª®			ªPtº¼		
¼©Pt	...›●›○ ▫›■ffi–℞—		ªPtº²			ªPtª©	
¼¤Pt	—■○□■ ‹Pt ▫›■Pt	½Pt®ⁿ	ªPt²º		ºªPt®½	ºPt¼½	
¢ªPt	$“●–‡“		ªPt½½			ªPtªª	
	ff¹ᴺL⅓‰	**¼ºⁿPt½©**	**½²¤Pt©ⁿ**				
‡–⅜€⅓§ᴸ⊢ ff¹ᴺL⅓‰		**½º²£¤ª¢£¼½½Ptº¼**	**½²½£©¢®£©¤®Pt©ⁿ**				
⁎–℗⅓ᴳR⅝		**ªPtªªªº**	**ªPtªªªº**				

Import: All Countries

OTHER SODIUM HYPOCHLORITES

Unit: KGS

–Pt○¹Pt	—¹ᵛT—ᴺLᶜRRs	ffl⅓‰ᵛT⅝ᴸF €— ▫ᴸFPt Rx⅓⅛ᴸF	□ᵛT—ᴺL€ᴺLRs €— ᴺL®¹ᵛTᴸF⅓—⅜ᴸF				
		½ª½ª¥½ª½º	½ª½º¥½ª½½ ¡“ᴴTᶜR¥™⅓—¿	*□ᶜR¹₩ᴺL®	½ª½ª¥ ½ª½º	½ª½º¥ ½ª½½ ¡“ᴴTᶜR¥ ™⅓—¿	*□ᶜR¹₩ᴺL®
ºPt	“ffi–ff▫“Rx‡“	ªPt½¤			ªPtªn		
½Pt	—†‡○“ ■ ▫■		®Pt½¼			ªPt©®	
¼Pt	□›▫●“○...	¼Pt¢º			ªPtª¢		
¢Pt	™“■“○	ªPtº¼			ªPtªª		
²Pt	○›ff†›▫Rx“○‹		ºPtn®			ªPtº¢	
nPt	–‡○□“■■▫›	ªPtª¼			ªPtªº		
®Pt	ffi SM	ºPt¤²	ªPt©½		ªPtº©	ªPtª®	
©Pt	ffi – “	ªPtº¢	ªPtªº		ªPtªº	ªPtªª	
	ff¹ᴺL⅓‰	²Pt¤¢	¤Pt®¼				
‡–⅜€⅓§ᴸF ff¹ᴺL⅓‰		½¤º£²¤²£®®ªPtª¢	¼ⁿ®£¢²©£½ⁿºPt²®				
*–®⅓ᶜR⅝		ªPtªªªª	ªPtªªªª				

Financials & Comparison of Major Indian Players/Companies

Source: CMIE

About Financial Statements of CMIE Database

A reasonably comprehensive list of all the information is listed in this flattened structure. The list reflects the usual disclosures made by companies. It is long as it tries to capture as much of granular information as possible.

Separately, CMIE database captures the disclosures made by companies in their Annual Reports according to the various Accounting Standards specified by the Institute of Chartered Accountants of India and according to the stipulations of the Reserve Bank of India.

There is an overlap of information presented and the disclosures as per the Accounting Standards and RBI stipulations. The data is normalised as per the CMIE database methodology and the rest is captured without normalisation since these presentations are highly standardised.

Profits & Appropriations

Description:

There are various measures of profits of companies. These are either gross or net of depreciation, amortisation, interest payments, direct taxes, prior-period and extra-ordinary transactions, etc. All measures of profits are essentially derived from the entries made under income and expenses in the CMIE database. Since all sources of income and all heads of expenses are captured comprehensively in CMIE database, it is possible to derive the various measures of profits from these.

Profit after tax is an atomic indicator in CMIE database. The rest of the profit measures are all derived indicators. The profits after tax and all other measures of profits as derived from the database may differ from the profits as presented by the company. The most likely cause for this difference is the treatment of transactions pertaining to prior periods or because of extra-ordinary transactions during a year.

As mentioned earlier, profit after tax is an atomic Indicator in CMIE database. All other measures of profits are derived Indicators and these are presented in Measures of Profits under Derived Indicators of Profits. Some of these are applicable only to finance companies. These are PBPDTA and PBPT and their variants. PBDITA and its variants are applicable only to non-finance companies. The other two derived measures of profits used in CMIE database are PBT and Cash profits. These are applicable to all kinds of companies like PAT and its variants.

The term "variants" used earlier refers to the various income and expense items that are netted out to derive measures of profits that are often more useful than the profit measures gross of these.

For example, one of the variants is the suffix "net of P&E". "P&E" is prior period and extra-ordinary transactions. Profits are reduced by the net income from prior period and extra-ordinary transactions to ensure that the profits reflect transactions of the current year. Other variant suffixes are "net of P&E&OI", which is net of prior period and extra-ordinary transactions and net of other income; and, "net of P&E&OI&FI", which is net of prior period and extra-ordinary transactions, net of other income and net of financial services incomes.

All these variants for the various profit measures are presented under Measures of Profits.

Derived Indicators of Profits includes one set of measures under Distribution of Profits. There are distributions of four measures of profits. These are - PBDITA, PBPDTA, PBPT and PAT. While the distribution of PAT shows the share of dividends and retained profits, the rest show the share of PAT and other components of the measures of profits. For example, PBDITA consists of provisions, write-offs, depreciation, amortisation, interest and PAT.

Profitability ratios are derived Indicators based on measures of profits, income and assets and liabilities. Over 35 such measures are provided in the CMIE database. These are divided into two parts - profit margins of income and returns over investments.

A number of Indicators that are used in the derivation of the sources of growth in profits are presented under the sub-part Sources of growth in profits. There are three measures of profits for which these Indicators are provided - PBDITA, PBT and PAT. Growth itself is computed at run-time and is not stored in CMIE database. However, these Indicators are used to understand the sources of growth in the three measures of profits. This understanding is based on a simple but useful arithmetical construct.

Total Liabilities

Description:

Total liabilities of a company are the sum of all the resources deployed by it. It includes all sums it owes to the shareholders in the form of share capital and reserves and surpluses, all sums it owes its lenders in the form of secured and unsecured loans and all current liabilities and provisions. It includes deferred tax liability.

In the CMIE database, total liabilities balance total assets and, total liabilities is the sum of the following:

1. Paid up shares and similar capital such as, forfeited equity capital, paid up preference capital, capital contribution, convertible warrants and minority interest reserves.

2. Reserves and funds, net of accumulated losses, if any. These include premium reserves, capital redemption reserves, revaluation reserves, employee stock option reserves, general reserves and balance as per profit and loss statement. While revaluation reserves is included here, in most presentations of CMIE database, it is netted out.

3. Borrowings

4. Current liabilities & Provisions

5. Deferred tax liability

The Annual Report provides a lot of information besides a structured presentation as outlined above. For example, it provides details of the authorised capital, issued and subscribed capital, number of shares issued, details of buy-backs, etc. All of this is covered under the Addendum information of Liabilities.

CMIE database makes fine distinctions in defining share holders funds and net worth. It defines free and specific reserves and capital employed clearly so that the same definitions apply to all companies. All of this a some more Indicators are presented in Derived Indicators of Liabilities.

Derived Indicators also include an entire section "Secured & unsecured borrowings". This section helps in the selection of Indicators relating to borrowings directly. The presentation in the main listing of all Indicators has one list of secured borrowings with its detailed break-up and another list of unsecured borrowings with its detailed break-up. As a result, the selection of total bank borrowings implied always adding secured bank borrowings and unsecured bank borrowings. To avoid the tedium, the Derived Indicators of Liabilities includes this section that provides the secured and unsecured borrowings for most of the frequently used borrowing items.

Total Assets

Description:

Total assets is a sum total of all the assets held by a company as on the last day of an accounting period. An asset is recognised in the balance sheet when it is probable that the future economic benefits associated with it will flow to the enterprise. As per Part I of Schedule VI of Companies Act 1956, assets are required to be disclosed under the heads Fixed Assets, Investments, Current Assets, Loans and Advances and Miscellaneous Expenditure no written off. This data field is broadly the sum of the amounts disclosed under each of these assets. Computationally and more precisely, this is the sum of the following data fields:

- Net fixed assets
- Capital work in progress and net pre-operative expenses pending allocation, if any
- Investments
- Inventories
- Receivables
- Loans & advances
- Cash & bank balances
- Deferred tax assets
- Miscellaneous expenses not written off

Net Cash Flow from Operating Activities

Description:

Cash flow from operating activities is the cash generated from the main or primary business activities of the company.

A company can present the cash flow statement under the direct or indirect method of presentation. This data field provides the amount of cash flow generated from operating activities, which is calculated, under the indirect method.

Under indirect method, the net profit or loss before tax and extraordinary income is used to calculate the amount of net cash flow generated from operating activities. In other words, the indirect method adjusts net income for items that affected reported net income but did not affect cash. Since income statement is prepared on an accrual basis, in which revenue is recognized when earned and not when received, net income does not represent the net cash flow from operating activities and it is necessary to adjust it for those items which affect net income although no actual cash has been paid or received against them.

To compute net cash flows from operating activities, non cash charges in the income statement are added back to net income, and non cash incomes deducted. Further, cash flows on account of changes in the working capital of the company are included.

When accounts receivable increase during the year, revenues on an accrual basis are higher than on a cash basis because goods sold on account are reported as revenues. In other words, operations for the period led to increased revenues, but not all of these revenues resulted in an increase in cash. Some of the increase in revenues resulted in an increase in accounts receivable. To convert net income to net cash flow from operating activities, the increase in accounts receivable must be deducted from net income.

When accounts payable increase during the period, expenses on an accrual basis are higher than they are on a cash basis because expenses are incurred for which payment has not taken place. To convert net income to net cash flow from operating activities, the increase in accounts payable must be added back to net income.

Cash flows from operating activities are obtained, broadly, by the following method:

Add: Net Profit before tax and extraordinary incomes Add: Non-cash Expenses (Depreciation, Amortization, Provisions made, write offs) Less: Non-cash Incomes (provisions written back) Add: Non-operating Expenses (Interest paid) Less: Non-operating Incomes (Interest, dividend income) Add: Non-operating Losses (Loss on Sale of Non-Current Assets, Foreign exchange losses) Less: Non-operating Gains (Gain on Sale of Non-Current Assets, Foreign exchange gains)

Section – I

This section comprises of selected companies with their contact details. These companies have major market share in their respective field.

Name of Company with Contact Details

Company Name	Address 1	Address 2	City	State	Pincode	Telephone Number	Fax Number	Email	Web Address
Acuro Organics Ltd.	27, Ashoka Chamber, 5-B, Rajendra Park,	Pusa Road, Opp Rachna Cinema,	New Delhi	NCT of Delhi	110060	47479797		accounts@acuro.in	
Aditya Birla Chemicals (India) Ltd.	'Ghanshyam Kunj',	Garhwa Road, P O Rehla,	Palamu	Jharkhand	822124	262211	262205	abcil.investors@adityabirla.com	www.adityabirlachemicalsindia.com
Ideal Chemicals (India) Pvt. Ltd.	Room No.19/D, 3rd Floor, Laud Mainsion,	Above HDFC Bank, 21, MK Marg, Opp Charni Road, Stn.,	Mumbai	Maharashtra	400004			idealchemical@rediffmail.com	
Lords Chloro Alkali Ltd.	SP-460, Matsya Industraial Area,		Alwar	Rajasthan	301030	3202817	2881360	secretarial@lordschloro.com	www.lordschloro.com
Meghmani Finechem Ltd.	Plot No. CH/1/CH/2, Dahej GIDC Indl.	Estate, Opp. Luna Chemical, Dahej,	Bharuch	Gujarat	392130	26562827	26463999	info@meghmanifinechem.com	www.meghmanifinechem.com
T G V Sraac Ltd.	Gondiparla,		Kurnool	Andhra Pradesh	518004	280006	280098	sraaccomm@netsourceonline.com	www.tgvgroup.com

Name of Director(S)

Company Name	Date	Director Name
Acuro Organics Ltd.	3/31/2020	ASHISH KARNANI
		JAGDISH RAI KARNANI
		JAYSHREE KARNANI
		ROHIT KARNANI
Aditya Birla Chemicals (India) Ltd.	3/31/2015	A K AGARWALA
		AKASH MISHRA
		BISWAJIT CHOUDHURI
		G M DAVE
		H K PANDA
		J C CHOPRA
		K C JHANWAR
		L S NAIK
		P P SHARMA
		PREETI GUPTA (MS.)
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	SAMEER SHARDA
		VIPUL PRABHATKUMAR MAHESHWARI
Lords Chloro Alkali Ltd.	3/31/21	AJAY VIRMANI
		CHANDRA SHAKHER PATHAK
		DEEPAK MATHUR
		DIPENDRA CHAUDHARY
		MADHAV DHIR
		MEENAKSHI SHARMA
		PAWAN NAYYAR
		POONAM RAWAT (MS.)
		RAJBIR SINGH MAKHNI
		RAJENDRA PRASAD CHAUHAN
		RAJIV KUMAR
		RAKESH AHUJA
		SANDEEP CHAUDHARI
		SANDEEP SINGH
		SRISHTI DHIR (MS)
		YUVRAJ AHUJA
Meghmani Finechem Ltd.	3/31/21	ANKIT PATEL

		BALKRISHNA T THAKKAR
		DARSHAN PATEL
		K D MEHTA
		KANUBHAI SHAKARABHAI PATEL
		KARANA PATEL
		KAUSHAL SOPARKAR
		MANUBHAI PATEL
		MAULIK PATEL
		NIRALI B PARIKH
		RAJU SWAMY
		SANJAY JAIN
		SANJAY KHATAU ASHER
T G V Sraac Ltd.	3/31/21	ASHA REDDY
		C RAJESH KHANNA
		G KRISHNA MURTHY
		GOPAL KRISHAN
		J NAGABHUSHANAM
		K KARUNAKAR RAO
		N JESWANTH REDDY
		P N VEDANARAYANAN
		SRINIVASA BABU CHAPPIDI
		T G VENKATESH
		V RADHAKRISHNA MURTHY

Credit Ratings

Company Name	Date	Agency	Instrument	Grade	Rating	Status	Amount	Company/Issuer not co-operating
							(Rs. Million)	
Lords Chloro Alkali Ltd.	11/12/21	BRICKWORK	Non-government debt	Moderate Safety	BBB-/A3	Downgraded	200	Y
		BRICKWORK	Term loans	Moderate Safety	BBB-	Downgraded	126	Y
	12/2/21	ICRA	Cash Credit	Moderate Safety	BBB	Reaffirmed	200	N
		ICRA	Term loans	Moderate Safety	BBB	Reaffirmed	130	N
	12/24/21	ICRA	Term loans	Moderate Safety	BBB	Initial Rating	89	N
		ICRA	Term loans	Moderate Safety	BBB	Reaffirmed	130	N
		ICRA	Working capital loan	Moderate Safety	BBB	Reaffirmed	200	N
Meghmani Finechem Ltd.	4/27/21	CRISIL	Long term Loans	Adequate Safety	A+	Reaffirmed	1440	N
		CRISIL	Long term Loans	Adequate Safety	A+	Reaffirmed	3725	N
		CRISIL	Working capital loan	Adequate Safety	A+	Reaffirmed	1335	N
	5/7/21	CRISIL	Long term Loans	Adequate Safety	A+	Reaffirmed	1056	N
		CRISIL	Long term Loans	Adequate Safety	A+	Reaffirmed	4809	N
		CRISIL	Working capital loan	Adequate Safety	A+	Reaffirmed	1335	N
	12/1/21	CRISIL	Fund based financial facility/instrument	High Safety	AA-	Upgraded	1056	N
		CRISIL	Long term Loans	High Safety	AA-	Upgraded	2909	N
		CRISIL	Long term Loans	High Safety	AA-	Upgraded	1900	N
		CRISIL	Working capital loan	High Safety	AA-	Upgraded	1335	N
	12/22/21	CRISIL	Long term Loans	High Safety	AA-	Reaffirmed	4178.6	N
		CRISIL	Long term	High Safety	AA-	Reaffirmed	1608.1	N

			Loans					
		CRISIL	Long term Loans	High Safety	AA-	Reaffirmed	864	N
		CRISIL	Long term Loans	High Safety	AA-	Reaffirmed	49.3	N
		CRISIL	Working capital loan	High Safety	AA-	Reaffirmed	1800	N
T G V Sraac Ltd.	12/31/21	CARE	Long term Loans	Adequate Safety	A-	Reaffirmed	1830.3	N
		CARE	Non-government debt	Adequate Safety	A-/A2+	Reaffirmed	3466.8	N
		CARE	Short-term loan	High Safety	A 2+	Reaffirmed	242	N

Plant Capacity

Company Name	Product/Raw Material name	Year ended	Capacity	Capacity - Unit	Production	Production - Unit	Sales quantity	Sales quantity - Unit	Sales value
		Date	units		units		units		Rs. Million
Acuro Organics Ltd.	CHEMICAL	202003							383.7
Aditya Birla Chemicals (India) Ltd.	ALUMINIUM CHLORIDE	201503							1296.6
	CAUSTIC SODA	201503							7205.5
	CHLORINATED PARAFFIN	201503							781.3
	COMPRESSED HYDROGEN	201503							
	DILUTED SULPHURIC ACID	201503							
	ELECTRICITY TO JSEB	201503							49
	HYDROCHLORIC ACID	201503							
	INTEREST	201503							11.6
	LIQUID CHLORINE	201503							
	OTHERS	201503							124
	PHOSPHORIC ACID	201503							1638.3
	POLY-ALUMINIUM CHLORIDE	201503							263.7
	SALE OF SCRAP & BARDANA	201503							86.9
	SALT	201503							53.1
	SBP	201503							617.5
	SODIUM HYPO CHLORITE	201503							
	TRADED GOODS	201503							391.3
Ideal Chemicals (India) Pvt. Ltd.	CHEMICALS	202003							1609.7
	COMMISSION	202003							0.5
	INTEREST	202003							6.8
	RENTAL INCOME	202003							1.1

Lords Chloro Alkali Ltd.	CALCIUM HYPOCHLORIDE (BLEACH LIQUOR)	202103							
	CAUSTIC SODA	202103	210	Tonnes /day					1541
	CAUSTIC SODA FLAKES	202103							
	HYDROCHLORIC ACID	202103							
	HYDROGEN GAS	202103							
	INTEREST	202103							0.4
	LIQUID CHLORINE	202103							
	OTHER PRODUCT	202103							
	SPENT SULPHURIC ACID	202103							
Meghmani Finechem Ltd.	BY-PRODUCTS	202103							10
	CAUSTIC POTASH	202103							
	CAUSTIC SODA	202103			302.21	'000 tonnes			8249.3
	GAIN ON SALE OF MUTUAL FUNDS	202103							3.9
	INTEREST	202103							1.5
	SCRAP	202103							25.7
T G V Sraac Ltd.	12 HYDROXY STEARIC ACID	202103							169.8
	BLEACH LIQOUR	202103							150.6
	CAUSTIC POTASH FLAKESH/LYE	202103							2248.3
	CAUSTIC SODA LYE	202103							4506.3
	CHLOROFORM	202103							346.6
	DIVIDEND	202103							0.6
	FREIGHT/HANDIN G CHARGES	202103							70.8
	GLYCERINE	202103							44.3
	HYDROCHLORIC ACID	202103							351.6
	HYDROGEN	202103							111.7
	HYDROGENATED CASTOR OIL	202103							39.2
	INTEREST	202103							55.7
	LIQUID CHLORINE	202103							789.5
	METHYLENE CHLORIDE	202103							1202.5

	OTHERS	202103							315.8
	POTASSIUM CARBONATE	202103							192.2
	PROCESS CHARGES	202103							15.1
	RENT	202103							1.2
	SOAP NOODLES	202103							530.7
	STEARIC ACID	202103							669
	TOILET SOAPS & BATHING SOAPS	202103							14.2

Location of Plant

Company Name	State	District	Location	Product	Year
Aditya Birla Chemicals (India) Ltd.	Jharkhand	Palamu	Rehla	Aluminium Chloride	3/31/2015
				Caustic Soda	3/31/2015
				Chlorinated Paraffin	3/31/2015
				Electricity To Jseb	3/31/2015
				Poly-Aluminium Chloride	3/31/2015
				Sbp	3/31/2015
	Uttar Pradesh	Sonbhadra	Renukoot	Aluminium Chloride	3/31/2015
				Chlorinated Paraffin	3/31/2015
				Electricity To Jseb	3/31/2015
				Poly-Aluminium Chloride	3/31/2015
				Sbp	3/31/2015
Lords Chloro Alkali Ltd.	Rajasthan	Alwar	Alwar	Caustic Soda	3/31/21
Meghmani Finechem Ltd.	Gujarat	Bharuch	Dahej	Caustic Soda	3/31/21
T G V Sraac Ltd.	Andhra Pradesh	Kurnool	Gondiparla	12 Hydroxy Stearic Acid	3/31/21
				Bleach Liqour	3/31/21
				Caustic Potash Flakesh/Lye	3/31/21
				Caustic Soda Lye	3/31/21
				Chloroform	3/31/21
				Glycerine	3/31/21
				Hydrochloric Acid	3/31/21
				Hydrogen	3/31/21
				Hydrogenated Castor Oil	3/31/21
				Liquid Chlorine	3/31/21
				Methylene Chloride	3/31/21
				Potassium Carbonate	3/31/21
				Soap Noodles	3/31/21
				Stearic Acid	3/31/21
				Toilet Soaps & Bathing Soaps	3/31/21

Name of Raw Material(S) Consumed With Quantity & Cost

Company Name	Product/Raw Material name	Year Ended	Raw material quantity	Unit of raw material qty	Raw material value
		Date	Units		Rs. Million
Aditya Birla Chemicals (India) Ltd.	ALUMINA HYDRATE	201503			
	ALUMINIUM INGOTS	201503			865.3
	BARIUM CARBONATE	201503			
	COAL	201503			1698.8
	HIGH - NORMAL PARAFFIN	201503			518.9
	HYDRATED LIME/LIME SLUDGE	201503			
	HYDROCHLORIC ACID	201503			185.6
	LIME	201503			324
	NORMAL PARAFFIN	201503			
	OTHERS	201503			754.5
	ROCK PHOSPHATE	201503			506
	SALT	201503			1233.3
	SODA ASH	201503			
	SULPHURIC ACID	201503			
Lords Chloro Alkali Ltd.	RAW MATERIALS	202103			264.7
Meghmani Finechem Ltd.	CHLOR ALKALI & ITS DERIVATIVES	202103			3861
T G V Sraac Ltd.	ACID OIL & OTHER OILS	202103	14687	Tonnes	837.2
	CASTOR OIL	202103	2374	Tonnes	203
	HYDROCHLORIC ACID NORMAL GRADE	202103			12.3
	METHANOL	202103	14030	Tonnes	374
	POTASIUM CHLORIDE & CARBONATES	202103	46408	Tonnes	1141
	RAW MATERIALS-SOAPS	202103			1
	SALT	202103	291445	Tonnes	770.6

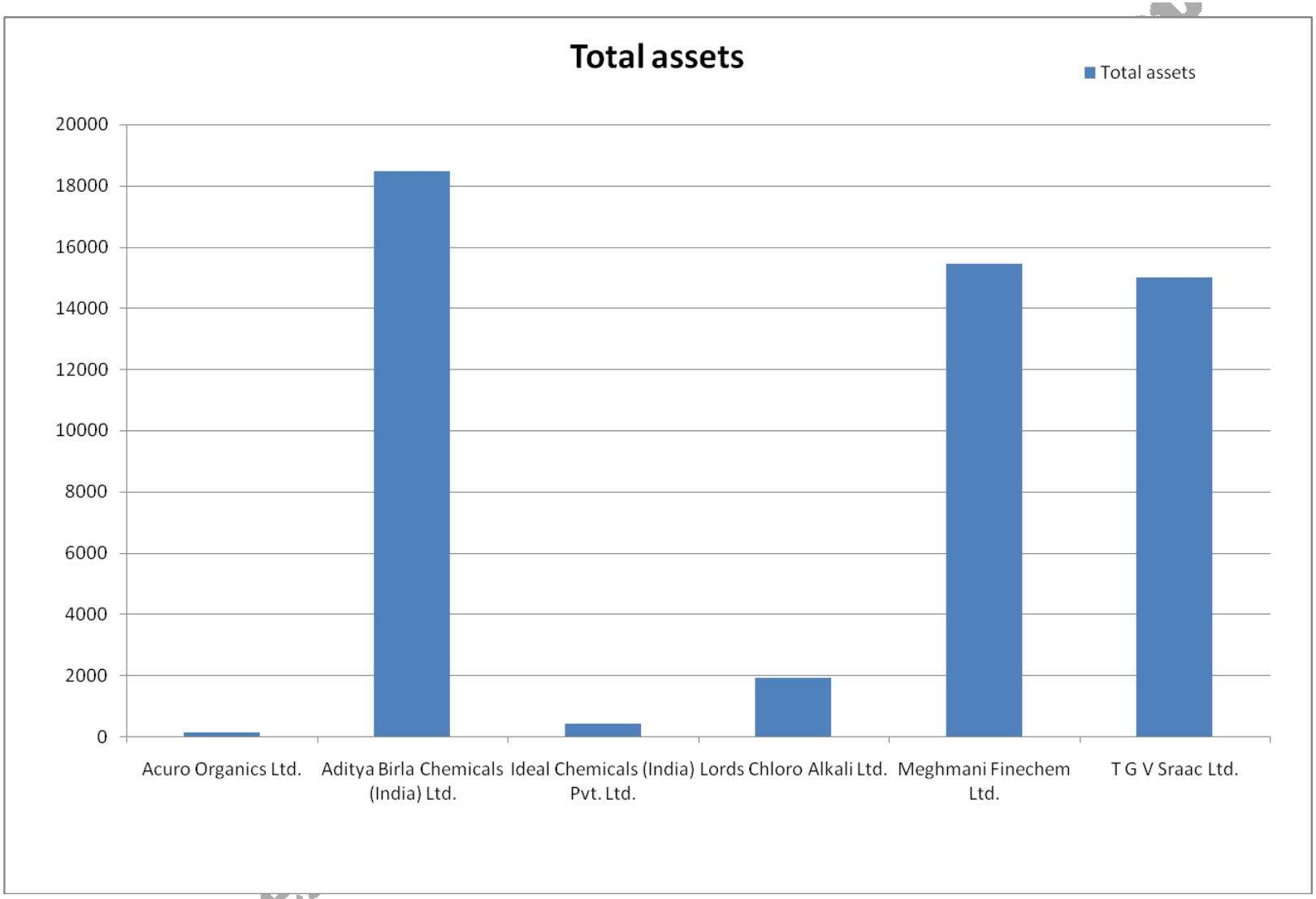
Section – II

This section provides comparative financial performance of companies given in Section – I. This comparison will be helpful to analysis the companies on the basis of their financials viz... Assets, Cash Flow, Cost as % Ge of Sales, Forex Transaction, Growth in Assets & Liabilities, Growth in Income & Expenditure, Income & Expenditure, Liabilities, Liquidity Ratios, Profitability Ratio, Profits, Return Ratios, Structure of Assets & Liabilities (%), Working Capital & Turnover Ratios, etc.....

P.S: Blanks or 0 in the data in above tables is due to non-disclosure of the data by the company.

Assets

	Date	Rs. Million	Rs. Million				Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million
Company Name	Year	Gross fixed assets	Capital work-in-progress	(net_fixed_assets)	((cash_bank_bal - prevy(cash_bank_bal)))	((inventories-prevy(inventories)))	Receivables	Expenses paid in advance	Loans & advances	Trade payables	Total assets
Acuro Organics Ltd.	3/31/2020	25.3		14.6	7.4	5.8	59	5.6	25.4	49.8	140.2
Aditya Birla Chemicals (India) Ltd.	3/31/2015	18254.1	255.5	14335	-24.6	-171.7	1378.5	321.2	813.2	1247.3	18472.3
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	141.1		27	30	-1	201.6		34.8	119.1	402.3
Lords Chloro Alkali Ltd.	3/31/21	2288.1	5.9	1207.5	-49.2	67.5	213.1	124	229.2	14.9	1917.9
Meghmani Finechem Ltd.	3/31/21	14237	1258.4	11023.2	7.1	55.6	1202.7	676.1	1054.7	1145.3	15452.3
T G V Sraac Ltd.	3/31/21	16456.2	1250.9	7739.1	334	-111.3	1037.9	93	1457.5	817.2	14986.6

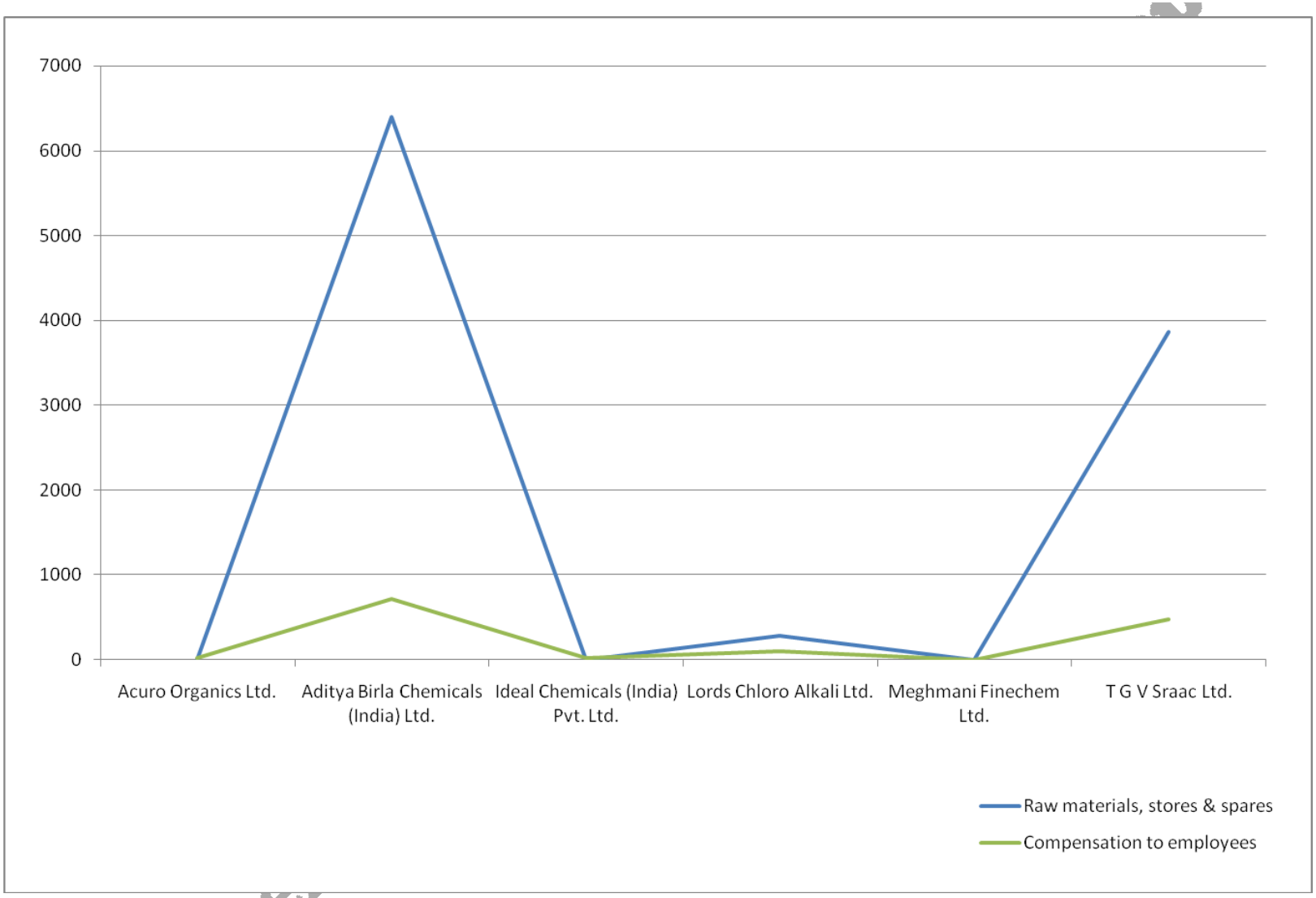

Total assets
Total assets
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
Acuro Organics Ltd.
Aditya Birla Chemicals (India) Ltd.
Ideal Chemicals (India) Pvt. Ltd.
Lords Chloro Alkali Ltd.
Meghmani Finechem Ltd.
T G V Sraac Ltd.

Cash Flow

	Date	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million
Company Name	Year	Net cash flow from operating activities	Cash flow generated from operations	Cash flow before extraordinary items	Net cash inflow or (outflow) from investment activities	Net cash inflow or (outflow) due to net increase or (decrease) in cash and cash equivalents	Cash and cash equivalents as at the beginning of the year	Cash and cash equivalents as at the end of the year	Net cash inflow or (outflow) from financing activities
Acuro Organics Ltd.									
Aditya Birla Chemicals (India) Ltd.	3/31/2015	2306.9	2506	2309.3	-1695.5	-13.8	30.9	17.1	-625.2
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	17.5	17.5	17.5	32.1	30	107	137	-19.6
Lords Chloro Alkali Ltd.	3/31/21	-6.5	-6.5	-6.5	-21.6	-59.3	61.3	2	-31.2
Meghmani Finechem Ltd.	3/31/21	2292	2578.2	2292	-1967.3	5.8	1	6.8	-318.9
T G V Sraac Ltd.	3/31/21	1316	1459.9	1316	-1634	257.5	67.2	324.7	575.5

Cost as %ge of Sales

	Date	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million
Company Name	Year	Raw materials, stores & spares	Stores, spares, tools consumed	Raw material expenses	Power, fuel & water charges	Compensation to employees	Excise duty	Advertising expenses	Marketing expenses	Distribution expenses
Acuro Organics Ltd.	3/31/2020				1.1	21.3		0.4	3.7	18.9
Aditya Birla Chemicals (India) Ltd.	3/31/2015	6400.7	314.4	6086.3	453.7	721.3	1265		24.2	183.9
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020				24.4	21.8			0.5	0.5
Lords Chloro Alkali Ltd.	3/31/21	281.4	16.7	264.7	1065	102.7			3.5	10.1
Meghmani Finechem Ltd.										
T G V Sraac Ltd.	3/31/21	3869	416.3	3452.7	3064.8	481.6		0.7	59.4	390

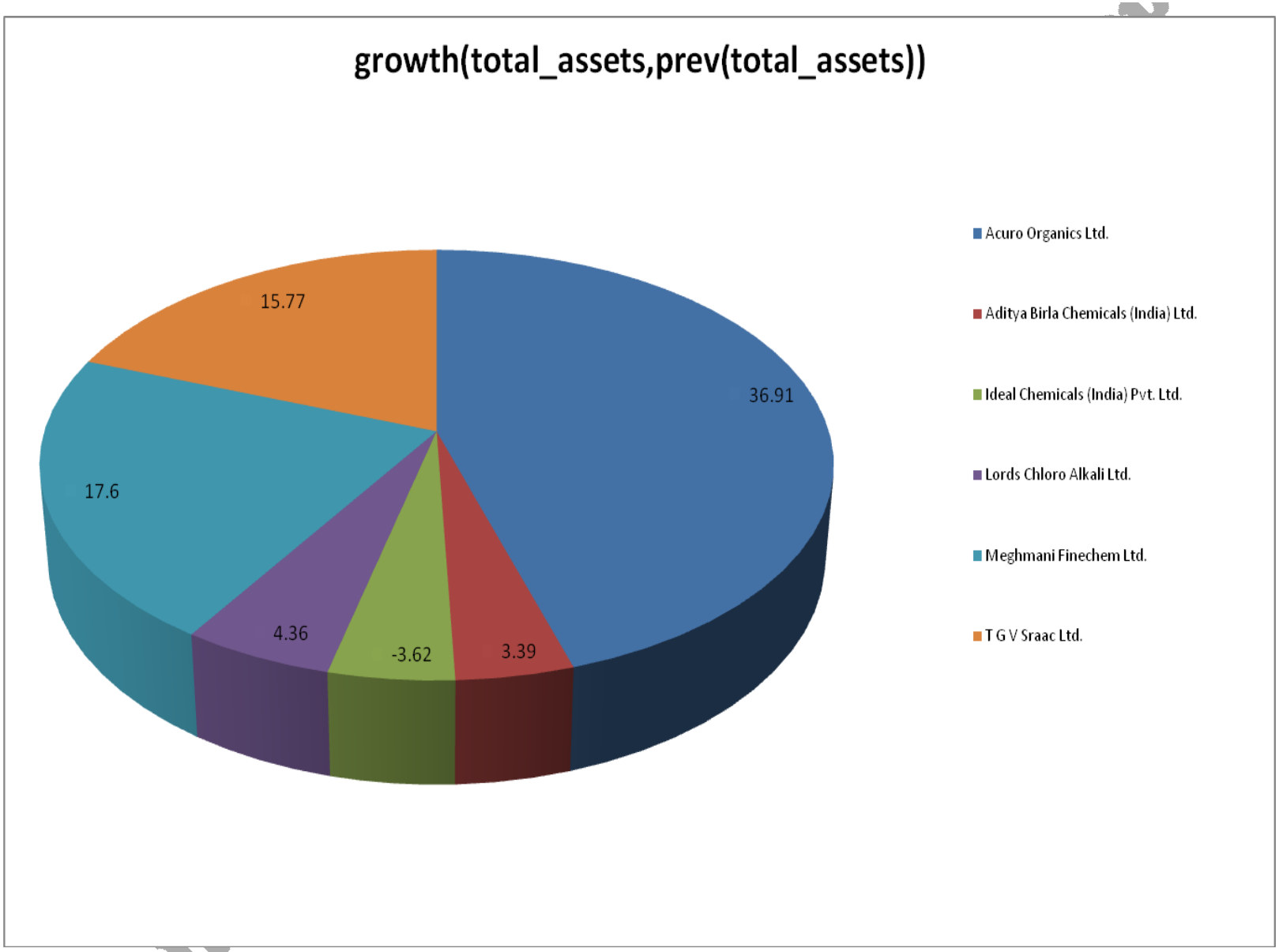

7000
6000
5000
4000
3000
2000
1000
0
Acuro Organics Ltd.
Aditya Birla Chemicals (India) Ltd.
Ideal Chemicals (India) Pvt. Ltd.
Lords Chloro Alkali Ltd.
Meghmani Finechem Ltd.
T G V Sraac Ltd.
Raw materials, stores & spares
Compensation to employees

Forex Transaction

	Date	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million		
Company Name	Year	Total forex earnings	Export of goods(fob)	Export of services	Total forex spending	Import of raw materials (cif)	Import of finished goods (cif)	Import of capital goods (cif)	(100*(export_earnings/sales))	((imported_rawmat/rawmat_purchased)*100)
Acuro Organics Ltd.										
Aditya Birla Chemicals (India) Ltd.	3/31/2015	482.6	482.6		937.5	577.3		352.7	3.85	9.98
Ideal Chemicals (India) Pvt. Ltd.										
Lords Chloro Alkali Ltd.										
Meghmani Finechem Ltd.										
T G V Sraac Ltd.	3/31/21	583	582.6		1899.7	883.2		444.5	4.97	42.44

Growth in Assets & Liabilities

		Date							Rs. Million
Company Name	growth(gross_fixed_assets,prev(gross_fixed_assets))	Year	growth(net_fixed_assets,prev(net_fixed_assets))	growth(current_assets,prev(current_assets))	growth(total_assets,prev(total_assets))	growth(use_borrowings,prev(use_borrowings))	growth(total_liabilities,prev(total_liabilities))	growth(net_worth,prev(net_worth))	Total assets
Acuro Organics Ltd.	47.09	3/31/2020	89.61	29.46	36.91		36.91	63.32	140.2
Aditya Birla Chemicals (India) Ltd.	11.26	3/31/2015	9.35	-11.63	3.39		3.39	5.98	18472.3
Ideal Chemicals (India) Pvt. Ltd.	7.46	3/31/2020	31.07	-3.14	-3.62		-3.62	20.07	402.3
Lords Chloro Alkali Ltd.	0.77	3/31/21	0.27	16.13	4.36		4.36	-2.17	1917.9
Meghmani Finechem Ltd.	106.84	3/31/21	150.42	41.3	17.6		17.6	27.02	15452.3
T G V Sraac Ltd.	1.68	3/31/21	-4.18	13.87	15.77		15.77	12.77	14986.6


growth(total_assets,prev(total_assets))
36.91
3.39
-3.62
4.36
17.6
15.77
Acuro Organics Ltd.
Aditya Birla Chemicals (India) Ltd.
Ideal Chemicals (India) Pvt. Ltd.
Lords Chloro Alkali Ltd.
Meghmani Finechem Ltd.
T G V Sraac Ltd.

Growth in Income & Expenditure

	Date								Rs. Million
Company Name	Year	growth (sales,prev(sales))	growth(rawmat_exp,prev(rawmat_exp))	growth(stores_spares_consumed, prev(stores_spares_consumed))	growth(compensation_to_employees, prev(compensation_to_employees))	growth(selling_distribution_exp,prev (selling_distribution_exp))	growth(pbdita, prev(pbdita))	growth(pat,prev (pat))	Total assets
Acuro Organics Ltd.	3/31/2020	-0.6			12.11	36.09	52.11	70.89	140.2
Aditya Birla Chemicals (India) Ltd.	3/31/2015	5.52	12.31	19	22.19	-36.07	3.19	-25.03	18472.3
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	-5.01			8.46	-88.76	16.72	107.69	402.3
Lords Chloro Alkali Ltd.	3/31/21	-24.35	-18.45	-39.05	-5.43	-15.53	-65.1		1917.9
Meghmani Finechem Ltd.	3/31/21	36.52	38.56	5.24	21.81	64.6	32.62	-9.96	15452.3
T G V Sraac Ltd.	3/31/21	-3.13	18.3	-14.94	-9.37	0.4	-4.19	11.4	14986.6

Income & Expenditure

	Date	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million
Company Name	Year	Sales	Other income	Change in stock	Raw materials, stores & spares	Prior period and extra-ordinary income	Power, fuel & water charges	Salaries, wages, bonus, ex gratia pf & gratuities paid	Selling & distribution expenses	Interest expense	Depreciation (net of transfer from revaluation reserves)
Acuro Organics Ltd.	3/31/2020	383.8		5.8		0.3	1.1	20.7	23	0.7	1.1
Aditya Birla Chemicals (India) Ltd.	3/31/2015	12521.8	36.9	12.4	6400.7	134.6	453.7	644.7	208.1	1072	633.1
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	1611.3	6.5	-1		0.5	24.4	20.8	1	19.8	3.3
Lords Chloro Alkali Ltd.	3/31/21	1541	0.1	51.9	281.4	30.7	1065	96.6	13.6	39.9	64.1
Meghmani Finechem Ltd.	3/31/21	8413.6	5.9	12	4003.7	10.7	260.9	503	172.5	309	735.5
T G V Sraac Ltd.	3/31/21	11717.1	73.1	-15.9	3869	2.5	3064.8	428.1	450.1	368.1	631.8

Liabilities

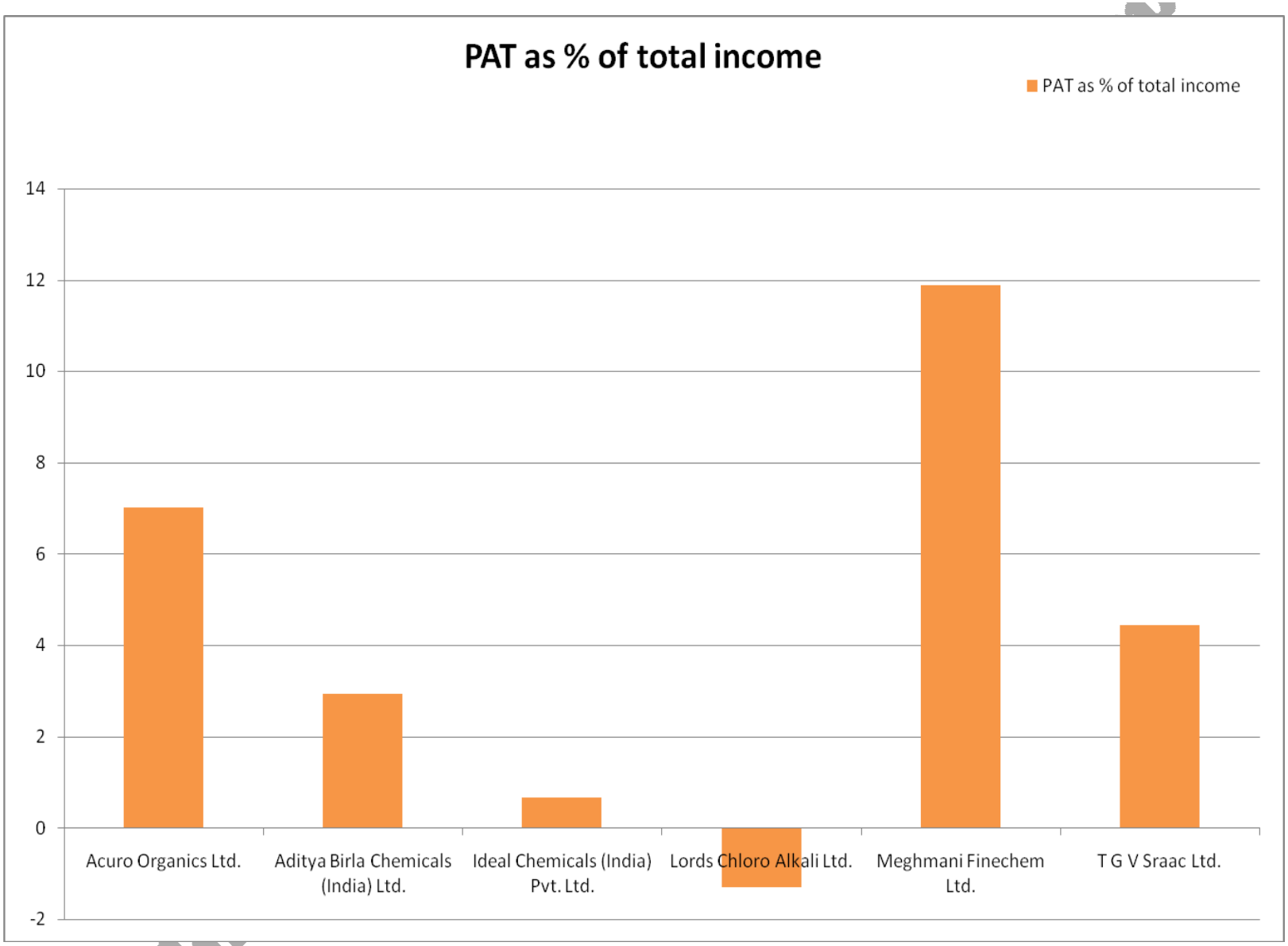
	Date	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million	Rs. Million
Company Name	Year	Net worth	Reserves and funds	Borrowings	Secured bank borrowings	Unsecured Bank borrowings	Current liabilities & provisions	Total liabilities	Trade payables
Acuro Organics Ltd.	3/31/2020	69.9	65.4	4.3			70.2	140.2	49.8
Aditya Birla Chemicals (India) Ltd.	3/31/2015	4433.6	4226.2	10518.4	8206.7	611.7	5799.3	18472.3	1247.3
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	64.6	54.5	159.3	120.6		266.9	402.3	119.1
Lords Chloro Alkali Ltd.	3/31/21	838.6	587.1	646.2	290.6		394.8	1917.9	14.9
Meghmani Finechem Ltd.	3/31/21	4732.1	4316.6	5425.5	3336.6		3888.4	15452.3	1145.3
T G V Sraac Ltd.	3/31/21	5983.3	5030.7	4976.3	4289.7		4292.4	14986.6	817.2

Liquidity Ratios

	Times	Times	Times	Times	Times	(%)	Rs. Million
Company Name	Cash to current liabilities (times)	Quick ratio (times)	Current ratio (times)	Debt to equity ratio (times)	Interest cover (times)	Interest incidence (%)	Total assets
Acuro Organics Ltd.	0.12	1.04	1.61	0.06	52.86	4.06	140.2
Aditya Birla Chemicals (India) Ltd.	0	0.24	0.57	2.37	1.73	10.43	18472.3
Ideal Chemicals (India) Pvt. Ltd.	0.51	1.27	1.27	2.47	1.75	13.75	402.3
Lords Chloro Alkali Ltd.	0.03	0.59	1.32	0.77		6.34	1917.9
Meghmani Finechem Ltd.	0	0.31	0.46	1.59	6.14	5.76	15452.3
T G V Sraac Ltd.	0.15	0.4	0.7	0.83	2.24	8.04	14986.6

Profitability Ratio

	Date	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Company Name	Year	PBDITA as % of total income	PBT as % of total income	PAT as % of total income	PBDITA net of P&E as % of total income net of P&E	PBPT net of P&E&OI as % of total income net of P&E	Net profit margin	Operating profit margin of non-financial companies
Acuro Organics Ltd.	3/31/2020	10.32	9.51	7.02	10.07	9.62	6.94	10.08
Aditya Birla Chemicals (India) Ltd.	3/31/2015	20.89	7.3	2.93	19.61	6.04	1.89	19.7
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	2.36	0.94	0.66	1.51	0.51	0.63	1.53
Lords Chloro Alkali Ltd.	3/31/21	5.1	-1.52	-1.3	3.11	-3.55	-3.31	3.11
Meghmani Finechem Ltd.	3/31/21	31.67	18.95	11.88	30.82	18.79	11.77	31.06
T G V Sraac Ltd.	3/31/21	13.33	4	4.43	12.03	3.5	4.52	12.2


PAT as % of total income
PAT as % of total income
14
12
10
8
6
4
2
0
-2
Acuro Organics Ltd.
Aditya Birla Chemicals (India) Ltd.
Ideal Chemicals (India) Pvt. Ltd.
Lords Chloro Alkali Ltd.
Meghmani Finechem Ltd.
T G V Sraac Ltd.

Profits

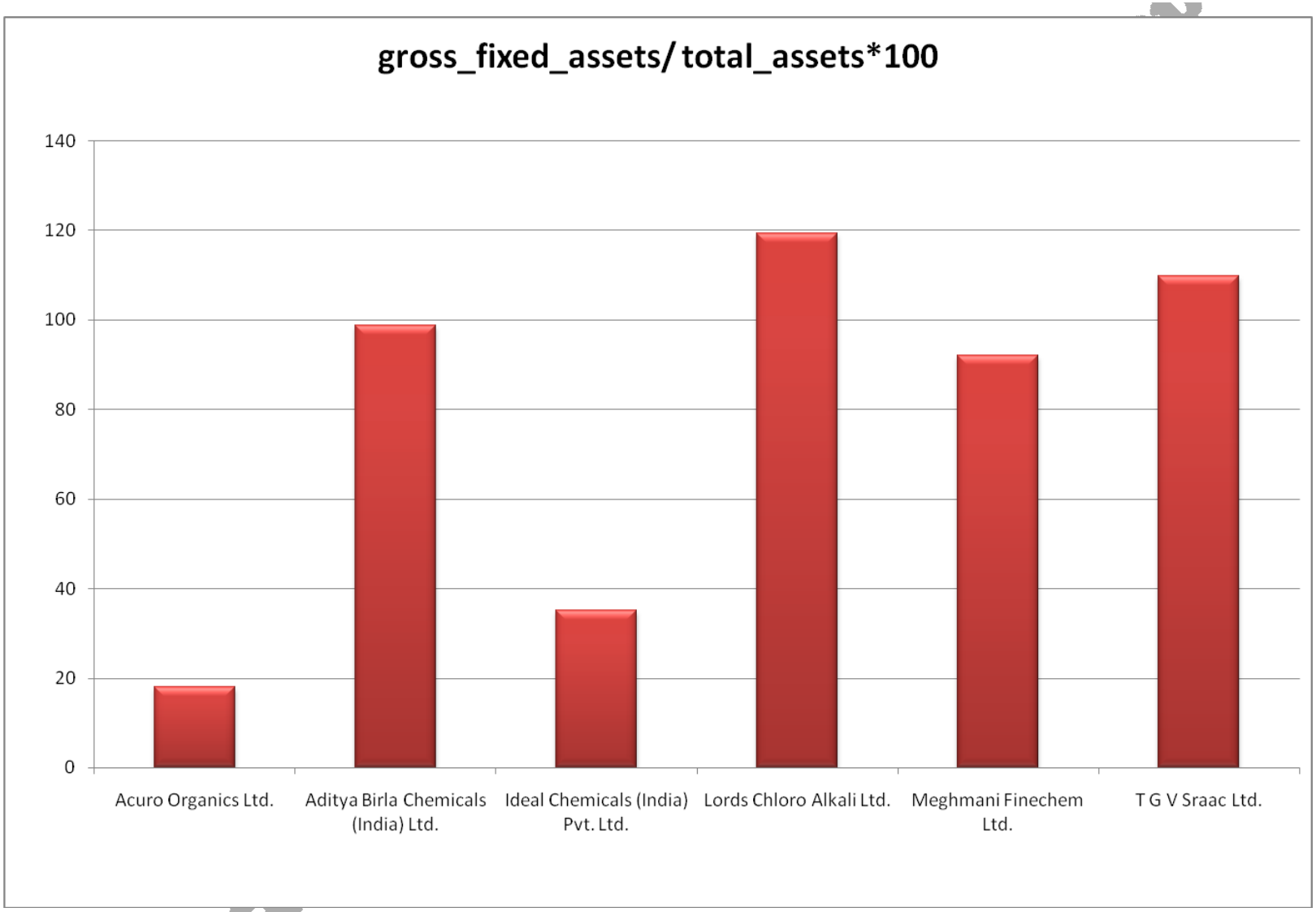
	Date	Rs. Million	Rs. Million	Rs. Million	Times	Rs. Million
Company Name	Year	PBDITA	PBT	Operating profit of non-financial companies	PAT net of P&E / total income net of P&E (times)	Change in PBT net of P&E&OI because of change in financial service income
Acuro Organics Ltd.	3/31/2020	39.7	36.6	38.7	0.07	-8.25
Aditya Birla Chemicals (India) Ltd.	3/31/2015	2654.9	928.4	2466.4	0.02	-315.52
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	38.4	15.3	24.6	0.01	-0.08
Lords Chloro Alkali Ltd.	3/31/21	80.2	-23.9	47.9	-0.03	
Meghmani Finechem Ltd.	3/31/21	2687.9	1608.5	2613.1	0.12	-223.3
T G V Sraac Ltd.	3/31/21	1584.6	475.4	1429.6	0.05	422.23

Return Ratios

	Date	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Company Name	Year	Return on net worth	PAT as % of net worth	Return on capital employed	PAT as % of capital employed	Return on total assets	PAT as % of GFA excl reval	PAT as % of total assets excl reval	PAT net of P&E as % of GFA excl reval
Acuro Organics Ltd.	3/31/2020	47.38	47.91	36.28	36.68	22.01	127.06	22.26	125.65
Aditya Birla Chemicals (India) Ltd.	3/31/2015	5.53	8.66	1.63	2.56	1.31	2.15	2.06	1.38
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	17.4	18.24	5.07	5.32	2.51	7.93	2.64	7.56
Lords Chloro Alkali Ltd.	3/31/21	-6.03	-2.41	-3.46	-1.38	-2.72	-0.89	-1.09	-2.24
Meghmani Finechem Ltd.	3/31/21	23.59	23.85	8.52	8.62	6.98	9.55	7.05	9.45
T G V Sraac Ltd.	3/31/21	9.52	9.33	5.26	5.15	3.87	3.23	3.79	3.29

Structure of Assets & Liabilities (%)

Company Name	Year	gross_fixed_assets/ total_assets*100	growth(net_fixed_assets,prev(net_fixed_assets))	growth(current_assets,prev(current_assets))	growth(net_worth,prev(net_worth))	growth(resv,prev(resv))	growth(mp_borrowings_total,prev(mp_borrowings_total))
Acuro Organics Ltd.	3/31/2020	18.05	89.61	29.46	63.32	70.76	
Aditya Birla Chemicals (India) Ltd.	3/31/2015	98.82	9.35	-11.63	5.98	5.82	
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020	35.07	31.07	-3.14	20.07	24.71	
Lords Chloro Alkali Ltd.	3/31/21	119.3	0.27	16.13	-2.17	-3.07	
Meghmani Finechem Ltd.	3/31/21	92.14	150.42	41.3	27.02	30.41	
T G V Sraac Ltd.	3/31/21	109.81	-4.18	13.87	12.77	17.04	


gross_fixed_assets/total_assets*100
140
120
100
80
60
40
20
0
Acuro Organics Ltd.
Aditya Birla Chemicals (India) Ltd.
Ideal Chemicals (India) Pvt. Ltd.
Lords Chloro Alkali Ltd.
Meghmani Finechem Ltd.
T G V Sraac Ltd.

Working Capital & Turnover Ratios

Company Name	Year	Raw material cycle (days)	WIP cycle (days)	Finished goods cycle (days)	Debtor days (days)	Gross working capital cycle (days)	Creditor days (days)	Cash to current liabilities (times)	Raw material turnover (times)	Debtors turnover (times)	Creditors turnover (times)
Acuro Organics Ltd.	3/31/2020			36.23	51.55	87.78	42.29	0.12		7.08	8.63
Aditya Birla Chemicals (India) Ltd.	3/31/2015	73.87	4.2	9.11	37.75	124.93	64.59	0	4.94	9.67	5.65
Ideal Chemicals (India) Pvt. Ltd.	3/31/2020			0.33	50.2	50.53	36.69	0.51		7.27	9.95
Lords Chloro Alkali Ltd.	3/31/21	136.97	12.19	12.12	45.37	206.65	3.35	0.03	2.66	8.04	108.83
Meghmani Finechem Ltd.	3/31/21	38.3		5.63	42.44	86.38	47.47	0	9.53	8.6	7.69
T G V Sraac Ltd.	3/31/21	97.69	2.77	6.22	28.7	135.38	33.45	0.15	3.74	12.72	10.91

Company Profile of Major Players

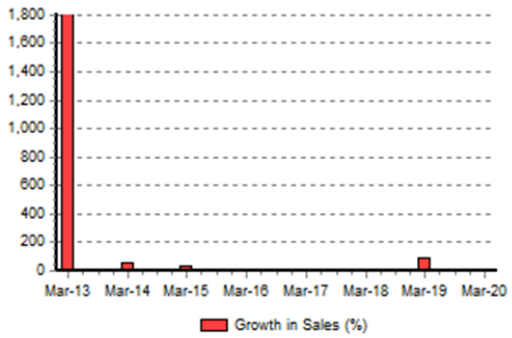
ACURO ORGANICS LTD.

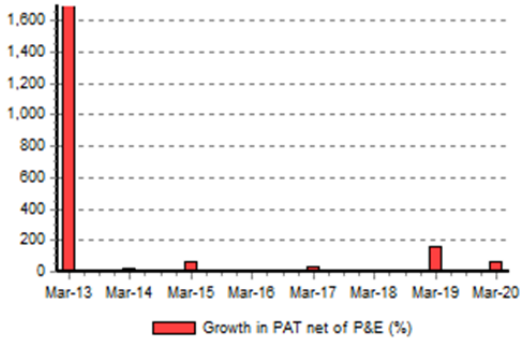
CMIE company code	504308
ROC regn. no.	55 - 229252
CIN code	U24232DL2011PLC229252
Board of directors (select)	
Director	Jagdish Rai Karnani
Director	Ashish Karnani
Director	Rohit Karnani
Director	Jayshree Karnani

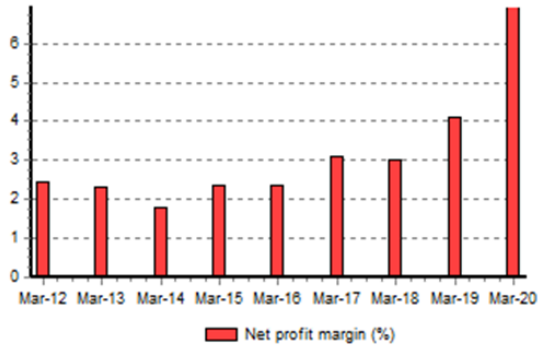
Address / Contact

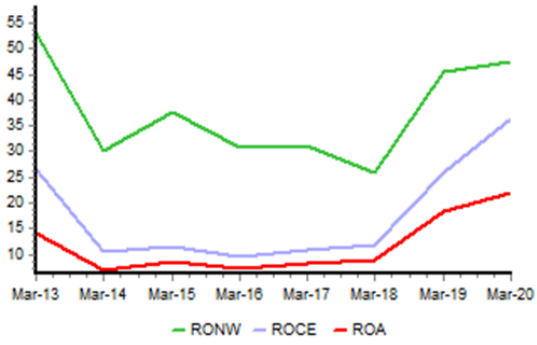
27, Ashoka Chamber, 5-B,
Rajendra Park, Pusa Road Opp Rachna Cinema,
New Delhi NCT of Delhi 110060
Tel: 91-11-47479797

Ownership group & auditors	
Ownership	Private (Indian)
Auditors	O P Goyal & Co.









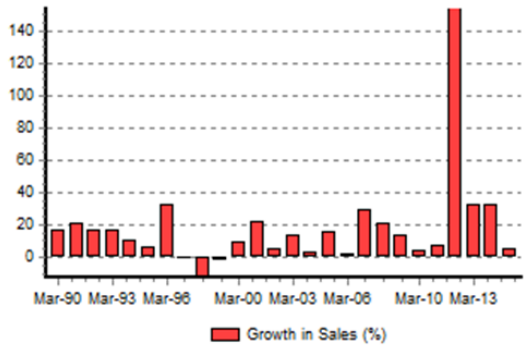
ADITYA BIRLA CHEMICALS (INDIA) LTD.

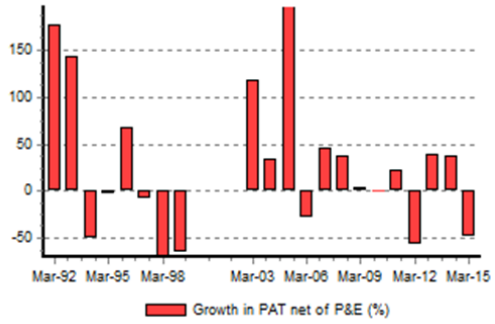
CMIE company code	35499
ROC regn. no.	27 - 1255
CIN code	L24100JH1976PLC001255
Board of directors (select)	
Director	A K Agarwala
Director	L S Naik
MD	K C Jhanwar
Addnl. Director	Preeti Gupta (Ms.)
Director	Biswajit Choudhuri

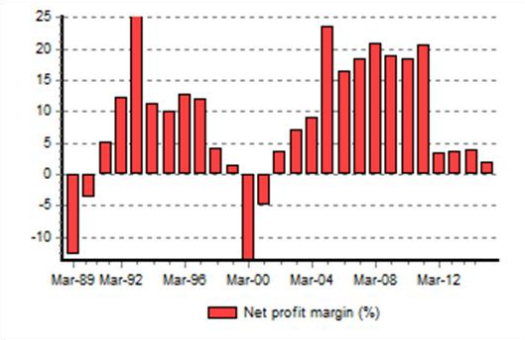
Address / Contact

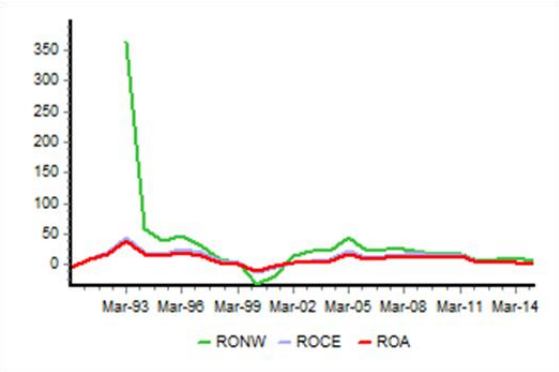
Ghanshyam Kunj',
Garhwa Road, P O Rehla,
Palamu Jharkhand 822124
Website: www.adityabirlachemicalsindia.com
Tel: 91-6584-262211

Ownership group & auditors	
Ownership	Birla Aditya Group
Auditors	Khimji Kunverji & Co.









IDEAL CHEMICALS (INDIA) PVT. LTD.

CMIE company code	97364
ROC regn. no.	11 - 129519
CIN code	U24231MH2000PTC129519

Board of directors (select)

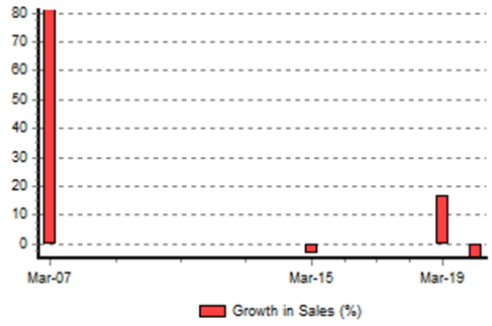
Chairperson & Director	Vipul Prabhatkumar Maheshwari
Director	Sameer Sharda

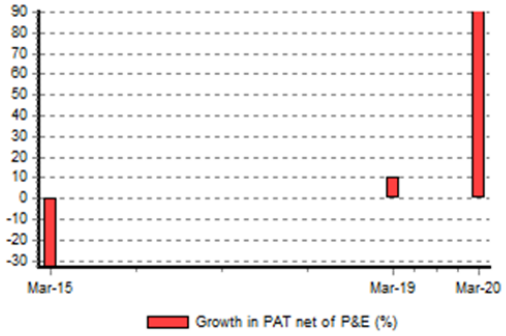
Address / Contact

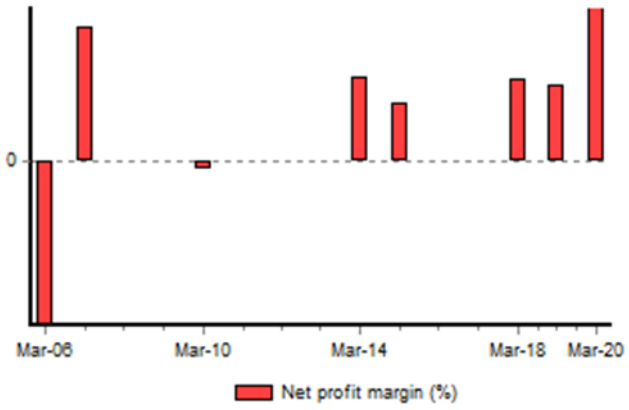
Room No.19/D, 3rd Floor, Laud Mainsion, Above HDFC Bank, 21, MK Marg, Opp Charni Road, Stn., Mumbai Maharashtra 400004

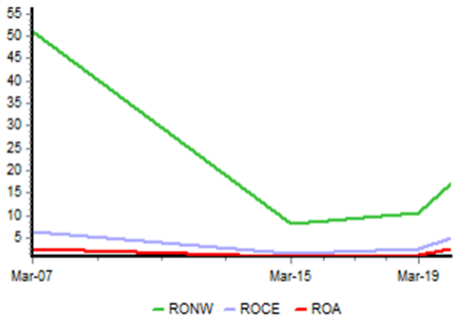
Ownership group & auditors

Ownership	Private (Indian)
Auditors	Nayak & Rane





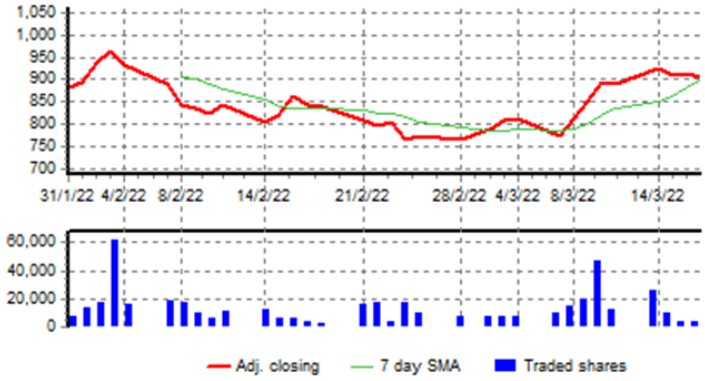


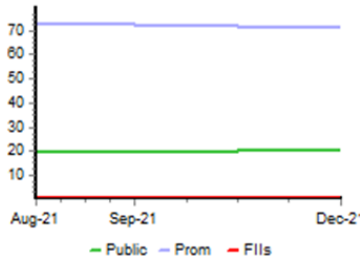


MEGHMANI FINECHEM LTD.

CMIE Co.code	375683	**Ownership group & auditors**		**Address / Contact**	
ROC regn. no.	04 - 51717	Ownership	Meghmani group	Plot No.CH/1/CH/2, Dahej GIDC Indl. Estate, Opp. Luna Chemical, Dahej, Bharuch Gujarat 392130	
CIN code	L24100GJ2007PLC051717	Auditors	S R B C & Co. L L P	Website: www.meghmanifinechem.com	
				Tel: 91-79-26562827	

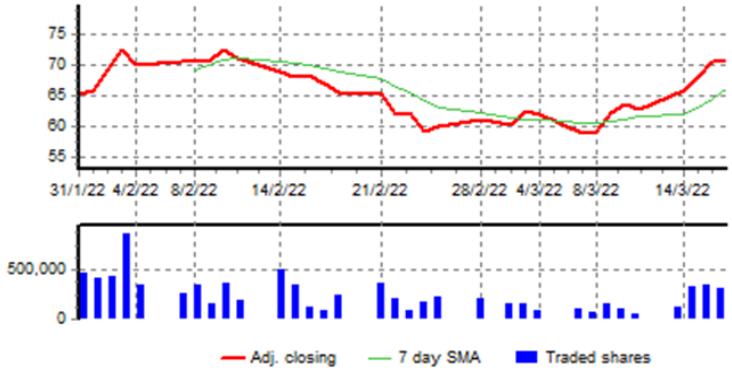
Shareholding (%)



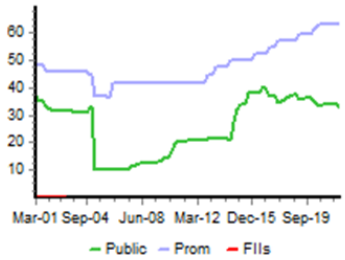


T G V SRAAC LTD.

						Address / Contact
CMIE Co.code	233583		**Ownership group & auditors**			
ROC regn. no.	Jan-77		Ownership	T G Venkatesh Group		Gondiparla,
CIN code	L24110AP1981PLC003077		Auditors	K S Rao & Co.		Kurnool Andhra Pradesh 518004 Website: www.tgvgroup.com
						Tel: 91-8518-280006



Shareholding (%)



Export & Import Statistics of India

Export Statistics of Sodium Hypochlorite

Date	Exported Product Description	Quantity	Unit	Value in Indian Rupees	Rate in Indian Rupees	Foreign Port	Foreign Country	Indian Port	Mode
1/6/21	LABORATORY CHEMICALS: SODIUM HYPOCHLORITE SOLN.	1	NOS	1397.56	1397.56	Jebel Ali	UNITED ARAB EMIRATES	Hazira	Sea
1/21/21	392 Packages Packed in 60 Kg Blue Carboy s with Vent cap U.N. Packing Non Palletised Sodium Hypochlorite	23.52	MTS	430899.3	18320.55	Mombasa	UGANDA	Hazira	Sea
1/27/21	SODIUM HYPOCHLORITE SOLUTION (10-12%) Mi	21.6	MTS	369000	17083.33	Dar Es Salaam	TANZANIA	Hazira	Sea
1/27/21	SODIUM HYPOCHLORITE SOLUTION (10-12%) Mi n	21.6	MTS	369339.5	17099.05	Dar Es Salaam	TANZANIA	Hazira	Sea
1/12/21	SODIUM HYPOCHLORITE (4%-6%) 5 LTR	100	NOS	90000	900	Phuntsholing	BHUTAN	Jaigaon	Road
1/25/21	SODIUM HYPOCHLORITE 10% SOLUTION	20	NOS	600	30	Phuntsholing	BHUTAN	Jaigaon	Road
1/12/21	SODIUM HYPOCHLORITE	17500	KGS	117250	6.7	Birgunj	NEPAL	Raxaul	Road
1/25/21	SODIUM HYPOCHLORITE	18140	KGS	121538	6.7	Birgunj	NEPAL	Raxaul	Road
1/31/21	SODIUM HYPOCHLORITE SOLUTION LR-5L	19	NOS	8000	421.053	Kathmandu	NEPAL	Raxaul	Road
1/27/21	SODIUM HYPOCHLORITE 3%	150	NOS	15000	100	Bhairawa	NEPAL	Sonauli	Road
1/27/21	SODIUM HYPOCHLORITE 5%	20	NOS	1999.99	100	Bhairawa	NEPAL	Sonauli	Road
1/7/21	LABORATORY CHEMICALS-SODIUM HYPOCHLORITE SOL.(CHL.5%) 500 ML	5	PCS	727.49	145.498	Doha	QATAR	Chennai	Sea
1/14/21	DENTAL GOODS:Sodium Hypochlorite 3%	500	PCS	28831.39	57.663	Ashdod	ISRAEL	Delhi TKD	ICD
1/15/21	Sodium Hypochlorite 6.0%	22	NOS	21747.05	988.502	Niamey	NIGER	JNPT	Sea
1/30/21	SODIUM HYPOCHLORITE 12 % SUPPLIER-J.H. I NTERCHEM	24	MTS	595762.3	24823.43	Port Louis	MAURITIUS	JNPT	Sea
1/18/21	SODIUM HYPOCHLORITE SOLUTION LR	20	NOS	4000	200	Phuntsholing	BHUTAN	Jaigaon	Road
1/15/21	Sodium Hypochlorite & calcium Hypochorite Batch Plant	1	PCS	3513780	3513780	Harare	ZIMBABWE	JNPT	Sea
1/16/21	DESIGN AND SUPPLY OF CHLORINATION SYSTE	1	SET	2140080	2140080	Aqaba (El Akaba)	JORDAN	Chennai	Sea

	MFOR SODIUM HYPOCHLORITE PLANT								
2/9/21	SODIUM HYPOCHLORITE 3% OR 5% PACK	10	NOS	1398.73	139.873	MAHE ISLAND	SEYCHELLES	Mumbai	Air
2/23/21	SODIUM HYPOCHLORITE SOLUTION	20	KGS	800.02	40.001	SAMSTE BHUTAN	BHUTAN	Chamurchi	Road
2/5/21	392 Packages Packed in 60 Kg Blue Carboy s with Vent cap U.N. Packing Non Palletised Sodium Hypochlorite	23.52	MTS	395829	16829.46	Dar Es Salaam	TANZANIA	Hazira	Sea
2/8/21	SODIUM HYPOCHLORITE	62	KGS	2359.04	38.049	SAMDRUP-JONKHAR	BHUTAN	Darranga	Road
2/1/21	SODIUM HYPOCHLORITE SOLUTION 5 LTR (RANK EM)	4	NOS	2633.88	658.47	Phuntsholing	BHUTAN	Jaigaon	Road
2/3/21	SODIUM HYPOCHLORITE	9.89	MTS	131042.5	13250	Biratnagar	NEPAL	Jogbani	Road
2/8/21	SODIUM HYPOCHLORITE	15.63	MTS	211005	13500	Biratnagar	NEPAL	Jogbani	Road
2/18/21	SODIUM HYPOCHLORITE DIVERSEY	3	NOS	21060	7020	Phuntsholing	BHUTAN	Jaigaon	Road
2/4/21	SODIUM HYPOCHLORITE	24.22	MTS	220402	9100	Birgunj	NEPAL	Raxaul	Road
2/4/21	SODIUM HYPOCHLORITE	18.22	MTS	122074	6700	Birgunj	NEPAL	Raxaul	Road
2/11/21	SODIUM HYPOCHLORITESOLN	90	PCS	17819.99	198	Bhairawa	NEPAL	Sonauli	Road
2/13/21	SODIUM HYPOCHLORITE	18.2	MTS	121940	6700	Birgunj	NEPAL	Raxaul	Road
2/14/21	SODIUM HYPOCHLORITE SOLUTION 500ML	400	NOS	29996.06	74.99	Birgunj	NEPAL	Raxaul	Road
2/14/21	SODIUM HYPOCHLORITE SOLUTION 5L	1302	NOS	260439	200.03	Birgunj	NEPAL	Raxaul	Road
2/24/21	SODIUM HYPOCHLORITE	24.14	MTS	229330	9500	Bhairawa	NEPAL	Sonauli	Road
2/10/21	SODIUM HYPOCHLORITE	17	KGS	2822	166	Phuntsholing	BHUTAN	Jaigaon	Road
2/16/21	SODIUM HYPOCHLORITE (CORROSIVE)	1120	NOS	39587.41	35.346	Colombo	SRI LANKA	JNPT	Sea
2/16/21	SODIUM HYPOCHLORITE (CORROSIVE)	1045	NOS	37000	35.407	Colombo	SRI LANKA	JNPT	Sea
2/16/21	SODIUM HYPOCHLORITE (CORROSIVE)	75	NOS	3000	40	Colombo	SRI LANKA	JNPT	Sea
2/25/21	SODIUM HYPOCHLORITE USP FOOD GRADE BATC	5550	KGS	879000	158.378	Tema	GHANA	JNPT	Sea
3/5/21	SODIUM HYPOCHLORITE SOLUTION(5 TO 6% CON CENTRATED SOLUTION	5	NOS	1487.59	297.518	RIYADH	SAUDI ARABIA	Mumbai	Air
3/15/21	ULTRAVET CLEAN (SODIUM HYPOCHLORITE - DIS INFICTANT SURFACE CLEANER) (PACK-10 X 1 LTR. HDPE BOTTLE)	500	LTR	43731.57	87.463	Umm Qasr	IRAQ	Noida-Dadri	ICD
3/15/21	ULTRAVET CLEAN (SODIUM HYPOCHLORITE -DIS	500	LTR	40233.19	80.466	Umm Qasr	IRAQ	Noida-Dadri	ICD

	INFICTANT SURFACE CLEANER) (PACK-4 X 5 L TR.HDPE BOTTLE)								
3/1/21	SODIUM HYPOCHLORITE 5LMFA	20	PCS	9600	480	Phuntsholing	BHUTAN	Jaigaon	Road
3/12/21	392 Packages Packed in 60 Kg Blue Carboy s with Vent cap U.N. Packing Non Palletised Sodium Hypochlorite	23.52	MTS	359556	15287.25	Dar Es Salaam	TANZANIA	Hazira	Sea
3/15/21	SODIUM HYPOCHLORITE SOLUTION (10-12%) Mi n	21.6	MTS	446253.8	20659.9	Tema	GHANA	Hazira	Sea
3/24/21	SODIUM HYPOCHLORITE	9990	KGS	219780	22	Phuntsholing	BHUTAN	Jaigaon	Road
3/15/21	SODIUM HYPOCHLORITE SOLUTION 5L	1200	NOS	240036	200.03	Birgunj	NEPAL	Raxaul	Road
3/22/21	SODIUM HYPOCHLORITE	17.88	MTS	119796	6700	Birgunj	NEPAL	Raxaul	Road
3/22/21	SODIUM HYPOCHLORITE	25640	KGS	110252	4.3	Birgunj	NEPAL	Raxaul	Road
3/22/21	SODIUM HYPOCHLORITE	24.56	MTS	223496	9100	Birgunj	NEPAL	Raxaul	Road
3/24/21	SODIUM HYPOCHLORITE SOLUTION 5L	600	NOS	131982	219.97	Kathmandu	NEPAL	Raxaul	Road
3/24/21	SODIUM HYPOCHLORITE SOLUTION 5L	300	NOS	65991	219.97	Kathmandu	NEPAL	Raxaul	Road
3/12/21	DENTAL GOODS:-Sodium Hypochlorite	150	PCS	21586.44	143.91	Muscat	OMAN	Delhi TKD	ICD
3/30/21	SODIUM HYPOCHLORITE 5.25% 250ML	6	NOS	567.09	94.515	Male	MALDIVES	Tuticorin	Sea
3/19/21	SODIUM HYPOCHLORITE 3%	3	PCS	1000	333.333	MAHE ISLAND	SEYCHELLES	Chennai	Air
3/19/21	SODIUM HYPOCHLORITE 3%	3	PCS	1000	333.333	MAHE ISLAND	SEYCHELLES	Chennai	Air
3/24/21	Sodium Hypochlorite 5% 100ml (B.NO- 4682	400	PCS	32000	80	TABILISI	GEORGIA	Delhi	Air
3/8/21	DENTAL GOODS:SODIUM HYPOCHLORITE.	80	PCS	3000	37.5	TIRANA	ALBANIA	Delhi	Air
3/30/21	FABRICATION & SUPPLY OF SHELL AND TUBE H EAT EXCHANGERS FOR SODIUM HYPOCHLORITE P LANT CHLORINE COOLER-I	1	NOS	1718400	1718400	Umm Qasr	IRAQ	Chennai	Sea
3/30/21	FABRICATION & SUPPLY OF SHELL AND TUBE H EAT EXCHANGERS FOR SODIUM HYPOCHLORITE P LANT CHLORINE COOLER-II	1	NOS	1718400	1718400	Umm Qasr	IRAQ	Chennai	Sea
3/30/21	FABRICATION &SUPPLY OF SHELL AND TUBE HE AT EXCHANGERS FOR SODIUM HYPOCHLORITE PL ANT	1	NOS	501200.4	501200.4	Umm Qasr	IRAQ	Chennai	Sea

	HYDROGEN COOLER -HTA								
3/24/21	Sodium Hypochlorite	300	LTR	16731.13	55.77	Conakry	GUINEA	JNPT	Sea
3/25/21	Sodium Hypochlorite 5% 250ml(CORROSIVE)	200	NOS	21480.11	107.401	Port Moresby	PAPUA NEW GUINEA	JNPT	Sea
3/13/21	Sodium Hypochlorite	300	LTR	17000	56.667	Conakry	GUINEA	JNPT	Sea
4/5/21	LABORATORY COLUMNS/ CONSUMABLES/REAGENTS LOBA SODIUM HYPOCHLORITE	1	NOS	286.19	286.19	NAIROBI	KENYA	Mumbai	Air
4/15/21	10% SODIUM HYPOCHLORITE	25	NOS	148540.6	5941.624	CLEVELAND HOPKINS	UNITED STATES	Bangalore	Air
4/12/21	SODIUM HYPOCHLORITE	1000	KGS	19000	19	Phuntsholing	BHUTAN	Jaigaon	Road
4/16/21	SODIUM HYPOCHLORITE 3% 500ML	40	PCS	2000.01	50	Biratnagar	NEPAL	Jogbani	Road
4/8/21	SODIUM HYPOCHLORITE	30200	KGS	129860	4.3	Birgunj	NEPAL	Raxaul	Road
4/8/21	SODIUM HYPOCHLORITE	25470	KGS	109521	4.3	Birgunj	NEPAL	Raxaul	Road
4/24/21	SODIUM HYPOCHLORITE IN 5 LTR PACK	20	NOS	9000	450	Phuntsholing	BHUTAN	Jaigaon	Road
4/24/21	SODIUM HYPOCHLORITE	20.74	MTS	138958	6700	Birgunj	NEPAL	Raxaul	Road
4/25/21	SODIUM HYPOCHLORITE (KILOGRAM)	26680	KGS	173420	6.5	Bhairawa	NEPAL	Sonauli	Road
4/28/21	SODIUM HYPOCHLORITE. 5LITS	1569	NOS	235350	150	Bhairawa	NEPAL	Sonauli	Road
4/29/21	SODIUM HYPOCHLORITE	2.76	MTS	44950	16286.23	Birgunj	NEPAL	Raxaul	Road
4/14/21	SODIUM HYPOCHLORITE 4-6	75	KGS	15000	200	Mukalla	YEMEN	Sabarmati	ICD
4/8/21	SHIP STORES NOT TO BE LANDED CONSUMABLE STORES 200 LTRS DRUM SODIUM HYPOCHLORITE 12% .	1600	LTR	78000	48.75	Singapore	SINGAPORE	Kolkata	Sea
4/23/21	SODIUM HYPOCHLORITE UNLOADING HOSE - OTH	1	PCS	114000	114000	LaemChabang	THAILAND	JNPT	Sea
4/23/21	BULK 10% SODIUM HYPOCHLORITE STORAGE TAN	2	PCS	4776000	2388000	LaemChabang	THAILAND	JNPT	Sea
4/30/21	SODIUM HYPOCHLORITE 12%	5000	KGS	112000	22.4	Djibouti	ETHIOPIA	JNPT	Sea
5/8/21	SODIUM HYPOCHLORITE	27060	KGS	216480	8	Bhairawa	NEPAL	Sonauli	Road
5/12/21	CARECHLOR-(SODIUM HYPOCHLORITE SOLUTION 12.5-15%) (15 X 200 LTR)	3600	KGS	132630	36.842	Singapore	SINGAPORE	Mumbai	Sea
5/12/21	SODIUM HYPOCHLORITE - CHEM AQUA MB 38	8	NOS	106079.3	13259.91	Male	MALDIVES	Chennai	Sea
5/13/21	DENTAL GOODS - SODIUM HYPOCHLORITE	200	PCS	13149.14	65.746	Umm Qasr	IRAQ	Delhi TKD	ICD
5/18/21	SODIUM HYPOCHLORITE 10%	196	NOS	37044.01	189	.NEPAL	NEPAL	Nepalgunj	Road

5/18/21	SODIUM HYPOCHLORITE 5%	960	NOS	170880	178	.NEPAL	NEPAL	Nepalgunj	Road
5/20/21	DILUTE SODIUM HYPOCHLORITE SOLUTION	56	NOS	6000	107.143	TEMORA	GHANA	Mumbai	Air
5/20/21	DILUTE SODIUM HYPOCHLORITE SOLUTION	56	NOS	6000	107.143	TEMORA	GHANA	Mumbai	Air
5/24/21	SODIUM HYPOCHLORITE	22.44	MTS	226644	10100	Birgunj	NEPAL	Raxaul	Road
5/25/21	SODIUM HYPOCHLORITE SOL	1000	NOS	291265.4	291.265	.NEPAL	NEPAL	Nepalgunj	Road
5/26/21	SODIUM HYPOCHLORITE SOL 5 LTR	400	PCS	118880	297.2	.NEPAL	NEPAL	Nepalgunj	Road
5/29/21	SODIUM HYPOCHLORITE	3436	PCS	429500	125	Kathmandu	NEPAL	Sonauli	Road
5/30/21	STANRELIEF GENERAL PURPOSE SOLUTION WITH SODIUM HYPOCHLORITE LTR	40	NOS	6600	165	Kathmandu	NEPAL	Sonauli	Road
5/12/21	ELECTRO CHLORINATION PILOT UNIT FOR 500GM/ HR SODIUM HYPOCHLORITE	1	SET	1098672	1098672	Portugalete	PORTUGAL	Chennai	Sea
5/10/21	LABORATORY CHEMICALS SODIUM HYPOCHLORITE SOLUTION 500ML	80	NOS	11571.28	144.641	Colombo	SRI LANKA	JNPT	Sea
5/28/21	Sodium Hypochlorite Dosing Skid (U-41) C hemical Injection Dosing Skid With Spare s	1	SET	2195444	2195444	Singapore	SINGAPORE	JNPT	Sea
6/1/21	DILUTE SODIUM HYPOCHLORITE SOLUTION	56	NOS	5659.94	101.07	TEMORA	GHANA	MUMBAI	AIR
6/11/21	PHARMACEUTICAL RAW MATERIAL FOR TESTING PURPOSE SODIUM HYPOCHLORITE SOLUTION	25	KGS	10837.5	433.5	COLOMBO	SRI LANKA	AHEMDA BAD	AIR
6/2/21	HYPOKEM " SODIUM HYPOCHLORITE 4%-6% " 5L TR	98	NOS	97999.99	1000	Phuntsholing	BHUTAN	JAIGAON	ROAD
6/9/21	Sodium hypochlorite Hi-AR TM /ACS ILTR	1	NOS	344	344	Phuntsholing	BHUTAN	JAIGAON	ROAD
6/12/21	HYPOKEM SODIUM HYPOCHLORITE 4%-6% 5 LTR	40	CTM	40000	1000	Phuntsholing	BHUTAN	JAIGAON	ROAD
6/12/21	SODIUM HYPOCHLORITE SOL 5%	1	NOS	208.03	208.03	.NEPAL	NEPAL	NEPALGU NJ	ROAD
6/19/21	SODIUM HYPOCHLORITE SOLUTION	80	NOS	75981.6	949.77	Phuntsholing	BHUTAN	JAIGAON	ROAD
6/19/21	SODIUM HYPOCHLORITE SOLUTION: 05 LIT	1	NOS	85.5	85.5	Phuntsholing	BHUTAN	JAIGAON	ROAD
6/24/21	CARECHLOR - (SODIUM HYPOCHLORITE SOLUTION 12.5-15%)	1000	KGS	94710	94.71	Jaigad	SINGAPORE	JAIGAD	SEA

6/25/21	SODIUM HYPOCHLORITE IN 5 LTRS PACK	40	NOS	18000	450	Phuntsholing	BHUTAN	JAIGAON	ROAD
6/16/21	SODIUM HYPOCHLORITE BASED DISINFECTANT	60	PCS	12600	210	Bhairawa	NEPAL	SONAULI	ROAD
6/30/21	SODIUM HYPOCHLORITE 5LITS	2010	NOS	301500	150	Bhairawa	NEPAL	SONAULI	ROAD
6/14/21	BULK 10% SODIUM HYPOCHLORITE STORAGE TAN K (FRP TANKS) PRESSURE VESSELS REACTORS CO LUMNS/ TOWERS/CHEMICAL STORAGE TANKS (RODT	2	PCS	4635231	2317615	LaemChabang	THAILAND	JNPT	SEA
6/14/21	SODIUM HYPOCHLORITE UNLOADING HOSE - OTH ER - RODTEP SL NO. - 2519	1	PCS	110363.7	110363.7	LaemChabang	THAILAND	JNPT	SEA
6/17/21	SODIUM HYPOCHLORITE UNLOADING PUMP SINGL	2	PCS	221000	110500	LaemChabang	THAILAND	JNPT	SEA
7/2/21	WM WASH BOTTLE LDPE SAFETY LABELED VENTE D-SODIUM HYPOCHLORITE (BLEACH) 500ML	2	NOS	6623.93	3311.965	Chicago	UNITED STATES	KOLKATA	SEA
7/5/21	SODIUM HYPOCHLORITE (500ML) OXFORD	5	NOS	1120.01	224.002	Phuntsholing	BHUTAN	JAIGAON	ROAD
7/5/21	SODIUM HYPOCHLORITE	24.3	MTS	245430	10100	Birgunj	NEPAL	RAXAUL	ROAD
7/9/21	SODIUM HYPOCHLORITE SOLUTION 5L BATCH: 67 56430621 PACK SIZE: 5 L	1175	NOS	235000	200	Kathmandu	NEPAL	RAXAUL	ROAD
7/15/21	50LTRS SODIUM HYPOCHLORITE DIVERSEY	1	PCS	4225.3	4225.3	Phuntsholing	BHUTAN	JAIGAON	ROAD
7/17/21	SODIUM HYPOCHLORITE DIVERSEY	2	NOS	9050.6	4525.3	Phuntsholing	BHUTAN	JAIGAON	ROAD
7/11/21	SODIUM HYPOCHLORITE SOLUTION 5L BATCH: 67 65870721 PACK SIZE: 5 L	1327	NOS	265400	200	Kathmandu	NEPAL	RAXAUL	ROAD
7/16/21	SODIUM HYPOCHLORITE	18.22	MTS	142116	7800	Birgunj	NEPAL	RAXAUL	ROAD
7/23/21	Sodium Hypochlorite 5% 100ml (DENTAL MATERIALS)	300	PCS	24320.98	81.07	TABILISI	GEORGIA	DELHI	AIR
7/27/21	SODIUM HYPOCHLORITE	60	KGS	1812	30.2	SAMDRUP-JONKHAR	BHUTAN	DARRANGA	ROAD
7/24/21	SODIUM HYPOCHLORITE	17.98	MTS	140244	7800	Birgunj	NEPAL	RAXAUL	ROAD
7/25/21	SODIUM HYPOCHLORITE	800	KGS	14400	18	Birgunj	NEPAL	RAXAUL	ROAD
7/27/21	SODIUM HYPOCHLORITE	500	LTR	11000	22	Birgunj	NEPAL	RAXAUL	ROAD
7/27/21	SODIUM HYPOCHLORITE SOLUTION 5L	501	NOS	112725	225	Birgunj	NEPAL	RAXAUL	ROAD
7/29/21	DENTAL GOODS - SODIUM HYPOCHLORITE	100	PCS	7000	70	Colombo	SRI LANKA	DELHI TKD	ICD
7/15/21	PVC/FRPSODIUM	1	NOS	843000	843000	BENAPOLE	BANGLADES	PETRAPOL	ROAD

	HYPOCHLORITE TOWER-2 (T-73						H	E	
7/30/21	PVC/FRP SODIUM HYPOCHLORITE STORAGE TANK	1	NOS	1227000	1227000	BENAPOLE	BANGLADESH	PETRAPOLE	ROAD
7/30/21	PVC/FRP SODIUM HYPOCHLORITE STORAGE TANK	1	NOS	1227000	1227000	BENAPOLE	BANGLADESH	PETRAPOLE	ROAD
7/31/21	SODIUM HYPOCHLORITE SOLUTION EMPLURA 5LT R	20	NOS	6300	315	Phuntsholing	BHUTAN	JAIGAON	ROAD
7/2/21	Dental Material-Sodium HypoChlorite (Hyposol 3%500ml)	1000	PCS	125021.7	125.022	Dubai	UNITED ARAB EMIRATES	JNPT	SEA
7/27/21	FRP TANK (SODIUM HYPOCHLORITE DOSING TAN	1	NOS	160000	160000	Lagos	NIGERIA	JNPT	SEA
8/6/21	SODIUM HYPOCHLORITE (LOT0000491989) (5X5 0ML X 420)	105	LTR	785450.8	7480.484	MADRID	SPAIN	MUMBAI	AIR
8/3/21	DISINFECTION LIQUID (SODIUMHYPOCHLORITE-5LTR JAR)	180	NOS	129600	720	Phuntsholing	BHUTAN	JAIGAON	ROAD
8/3/21	SODIUM HYPOCHLORITE (SODIUM HYPOCHLORITE 10-12%)	10000	KGS	240000	24	Phuntsholing	BHUTAN	JAIGAON	ROAD
8/6/21	SODIUM HYPOCHLORITE	700	KGS	25900	37	Phuntsholing	BHUTAN	JAIGAON	ROAD
8/6/21	SODIUM HYPOCHLORITE SOLUTION	52	MTS	584293.4	11236.41	Mombasa	KENYA	HAZIRA	SEA
8/9/21	SODIUM HYPOCHLORITE HIMEDIA	2	NOS	5002	2501	Phuntsholing	BHUTAN	JAIGAON	ROAD
8/6/21	SODIUM HYPOCHLORITE	17.68	MTS	137904	7800	Birgunj	NEPAL	RAXAUL	ROAD
8/13/21	DENTAL GOODS: SODIUM HYPOCHLORITE	10	PCS	722.69	72.269	DOHA	QATAR	DELHI	AIR
8/11/21	LIQUID BLEACH (SODIUM HYPOCHLORITE)	15000	KGS	191250	12.75	Bhairawa	NEPAL	SONAULI	ROAD
8/18/21	STANFRESH GENERAL PURPOSE SOLUTION WITH SODIUM HYPOCHLORITE 5 LTR	2000	KGS	55200.05	27.6	Bhairawa	NEPAL	SONAULI	ROAD
8/21/21	SODIUM HYPOCHLORITE SOLUTION ABOUT 4% W/ V AVAILABLE CHLORINE	3320	NOS	939447.6	282.966	Male	MALDIVES	CHENNAI	SEA
8/23/21	SODIUM HYPOCHLORITE	384	NOS	23040.02	60	Phuntsholing	BHUTAN	JAIGAON	ROAD
8/29/21	SODIUM HYPOCHLORITE	500	LTR	38000	76	Phuntsholing	BHUTAN	JAIGAON	ROAD
8/30/21	SODIUM HYPOCHLORITE SOLUTION 5%	165	NOS	16500	100	Phuntsholing	BHUTAN	JAIGAON	ROAD
8/27/21	SODIUM HYPOCHLORITE SOLUTION 5 LTR JAR	300	NOS	54000.1	180	.NEPAL	NEPAL	NEPALGUNJ	ROAD

8/29/21	(TEST KIT) SODIUM HYPOCHLORITE 8-10% 5LT R-TECH NO	10	NOS	2250.01	225.001	Birgunj	NEPAL	RAXAUL	ROAD
8/30/21	SODIUM HYPOCHLORITE SOLUTION 5%	165	NOS	17000	103.03	Phuntsholing	BHUTAN	JAIGAON	ROAD
8/13/21	Sodium Hypochlorite 5 lit	5	LTR	6000	1200	MAHE ISLAND	SEYCHELLES	CHENNAI	AIR
8/24/21	Sodium Hypochlorite 5 lit	5	LTR	6000	1200	MAHE ISLAND	SEYCHELLES	CHENNAI	AIR
8/25/21	Sodium Hypochlorite 5 lit	5	LTR	6000	1200	MAHE ISLAND	SEYCHELLES	CHENNAI	AIR
8/25/21	Sodium Hypochlorite 5 lit	5	LTR	6000	1200	MAHE ISLAND	SEYCHELLES	CHENNAI	AIR
8/25/21	Sodium Hypochlorite 5 lit	5	LTR	6000	1200	MAHE ISLAND	SEYCHELLES	CHENNAI	AIR
8/18/21	PVC/FRP SODIUM HYPOCHLORITE STORAGE TANK	1	NOS	1222000	1222000	BENAPOLE	BANGLADESH	PETRAPOLE	ROAD
9/5/21	SODIUM HYPOCHLORITE 2.4% LIQUID,1L(DGR I	24000	NOS	4449000	185.375	Dubai	UNITED ARAB EMIRATES	NOIDA-DADRI	ICD
9/10/21	SODIUM HYPOCHLORITE	6000	KGS	228000	38	Biratnagar	NEPAL	JOGBANI	ROAD
9/10/21	SODIUM HYPOCHLORITE	2000	KGS	76000	38	Biratnagar	NEPAL	JOGBANI	ROAD
9/11/21	SODIUM HYPOCHLORITE	9.9	MTS	131000	13232.32	Biratnagar	NEPAL	JOGBANI	ROAD
9/19/21	SODIUM HYPOCHLORITE	20	LTR	4000	200	BENAPOLE	BANGLADESH	PETRAPOLE	ROAD
9/4/21	SODIUM HYPOCHLORITE SOLUTIONS 4% SQ 30L	5	NOS	6000	1200	Birgunj	NEPAL	RAXAUL	ROAD
9/13/21	SODIUM HYPOCHLORITE SOLUTION	1248	NOS	250000	200.321	Birgunj	NEPAL	RAXAUL	ROAD
9/13/21	SODIUM HYPOCHLORITE SOLUTION	1249	NOS	250000	200.16	Birgunj	NEPAL	RAXAUL	ROAD
9/13/21	SODIUM HYPOCHLORITE	2.9	MTS	42000	14482.76	Birgunj	NEPAL	RAXAUL	ROAD
9/14/21	SODIUM HYPOCHLORITE	24.84	MTS	261000	10507.25	Bhairawa	NEPAL	SONAULI	ROAD

Import Statistics of Sodium Hypochlorite

Date	Imported Product Description	Quantity	Unit	Value in Indian Rupees	Rate in Indian Rupees	Foreign Port	Foreign Country	Indian Port	Mode
1/11/21	(FOC ITEM) SHC5 -SODIUM HYPOCHLORITE PENTAHYDRATE	0.5	KGS	4810	9620	TOKYO - NARITA	JAPAN	Bangalore	Air
1/13/21	SODIUM HYPOCHLORITE, 5 PERCENT AVAILABLE CHLORINE SOLUTION REGENT, ACS	24	LTR	121616.7	5067.36	LONDON - HEATHROW	UNITED STATES	Mumbai	Air
1/21/21	S0939-500G - SODIUM HYPOCHLORITE PENTAHYDRATE - (LAB CHEMICALS)	3	NOS	4465.26	1488.42	TOKYO	JAPAN	Bangalore	Air
2/5/21	L14709.0F Sodium hypochlorite, 11-15% available chlorine	10	LTR	5820.56	582.06	MANCHESTER	UNITED KINGDOM	Hyderabad	Air
2/8/21	L14709.PI Sodium hypochlorite, 11-15% available chlorine	90	LTR	89981.62	999.8	MANCHESTER	UNITED KINGDOM	Hyderabad	Air
2/11/21	L14709.0F Sodium hypochlorite, 11-15% available chlorine	5	LTR	2910.28	582.06	MANCHESTER	UNITED KINGDOM	Hyderabad	Air
2/11/21	L14709.0F Sodium hypochlorite, 11-15% available chlorine	2.5	LTR	1455.14	582.06	MANCHESTER	UNITED KINGDOM	Hyderabad	Air
2/11/21	L14709.0F Sodium hypochlorite, 11-15% available chlorine	12.5	LTR	7275.7	582.06	MANCHESTER	UNITED KINGDOM	Hyderabad	Air
2/26/21	L14709.APSodium hypochlorite, 11-15% available chlorine	5	LTR	5294.05	1058.81	MANCHESTER	UNITED KINGDOM	Hyderabad	Air
2/1/21	S0939-500G-SODIUM HYPOCHLORITE PENTAHYDRATE - (LAB CHEMICALS)	15	NOS	22281.02	1485.4	TOKYO	JAPAN	Bangalore	Air
2/9/21	SODIUM HYPOCHLORITE POTABLE GRADE PART NO 909001 (800 LTR)	500	KGS	25891.32	51.78	Rotterdam	NETHERLANDS	JNPT	Sea
2/16/21	SODIUM HYPOCHLORITE POTABLE GRADE PART NO 909001 (600 LTR)	50	KGS	2589.13	51.78	Rotterdam	NETHERLANDS	JNPT	Sea
4/14/21	239305-25ML SODIUM	1	NOS	1913.77	1913.77	CHICAGO	UNITED	Bangalore	Air

	HYPOCHLORITE SOLUTION G					O'HARE INT'L	STATES		
4/20/21	L14709.0F Sodium hypochlorite, 11-15% available chlorine	2.5	LTR	1518.5	607.4	MANCHESTER	UNITED KINGDOM	Hyderabad	Air
4/29/21	L14709.AP Sodium hypochlorite, 11-15% available chlorine	0.5	LTR	543.85	1087.7		UNITED KINGDOM	Hyderabad	Air
4/8/21	SODIUM HYPOCHLORITE (FOR IAF AIR CRAFT)	1	NOS	2387.63	2387.63	DALLAS/FT. WORTH TX	UNITED STATES	Delhi	Air
4/30/21	SODIUM HYPOCHLORITE POTABLE GRADE PART NO 909001 (600 LTR)	300	KGS	15534.79	51.783		NETHERLANDS	JNPT	Sea
5/11/21	239305-500ML SODIUM HYPOCHLORITE SOLUTION G	442	NOS	548240.1	1240.36	CHICAGO O'HARE INT'L	UNITED STATES	Bangalore	Air
5/11/21	239305-25ML SODIUM HYPOCHLORITE SOLUTION G	2	NOS	2796.07	1398.04	CHICAGO O'HARE INT'L	UNITED STATES	Bangalore	Air
5/17/21	239305-500ML SODIUM HYPOCHLORITE SOLUTION G	28	NOS	34461.59	1230.77	CHICAGO O'HARE INT'L	UNITED STATES	Bangalore	Air
5/17/21	239305-25ML SODIUM HYPOCHLORITE SOLUTION G	2	NOS	2774.45	1387.22	CHICAGO O'HARE INT'L	UNITED STATES	Bangalore	Air
5/17/21	SODIUM HYPOCHLORITE	10	NOS	124002.8	12400.28	NEW YORK	UNITED STATES	Delhi	Air
5/12/21	L14709.0FSodium hypochlorite, 11-15% available chlorine	2.5	LTR	1504.1	601.64	MANCHESTER	UNITED KINGDOM	Hyderabad	Air
5/20/21	(ALL ITEMS ARE OIL WELL PURPOSE) TREATMENT, WATER SODIUM HYPOCHLORITE 12%	12	NOS	60991.34	5082.61	Savannah	UNITED STATES	Chennai	Sea
6/30/21	(FOC ITEM) SHC5 -SODIUM HYPOCHLORITE PENTAHYDRATE	7	KGS	14095.62	2013.66		JAPAN	BANGALORE	AIR
6/7/21	L14709.AP Sodium hypochlorite, 11-15% available chlorine	0.5	LTR	543.33	1086.66	MANCHESTER	UNITED KINGDOM	HYDERABAD	AIR
6/7/21	L14709.0D Sodium hypochlorite, 11-15% available chlorine	10	LTR	10423.4	1042.34	MANCHESTER	UNITED KINGDOM	HYDERABAD	AIR
6/25/21	S0939-500MG - SODIUM HYPOCHLORITE PENTAHYDRATE - (LAB CHEMICAL)	1	NOS	1499.48	1499.48	TOKYO	JAPAN	BANGALORE	AIR
6/24/21	A32319 Sodium	1	PCS	1996.78	1996.78		UNITED	Chennai	SEZ

	hypochlorite solution (LAB CHEMICAL)						STATES		
7/2/21	239305-25ML SODIUM HYPOCHLORITE SOLUTION G	3	NOS	4170.39	1390.13	FRANKFURT /MAIN INT'L	GERMANY	BANGALORE	AIR
7/7/21	239305-25ML SODIUM HYPOCHLORITE SOLUTION G	5	NOS	6896.88	1379.38	CHICAGO O'HARE INT'L	UNITED STATES	BANGALORE	AIR
7/23/21	(31518-35) CP SODIUM HYPOCHLORITE SOLUTION UN1791-1.8.III(500G)	1	NOS	20412.14	20412.14	TOKYO	JAPAN	BANGALORE	AIR
7/31/21	239305-25ML SODIUM HYPOCHLORITE SOLUTION G	4	NOS	5613.62	1403.4		UNITED STATES	BANGALORE	AIR
7/2/21	SODIUM HYPOCHLORITE, 5 PERCENT AVAILABLE CHLORINE, SOLUTION,REAGENT, ACS - 4 L	64	LTR	350522.9	5476.92	LOS ANGELES	UNITED STATES	MUMBAI	AIR
7/7/21	239305-25ML SODIUM HYPOCHLORITE SOLUTION G	5	NOS	6896.88	1379.38	CHICAGO O'HARE INT'L	UNITED STATES	CHENNAI	SEA
7/20/21	909001 SODIUM HYPOCHLORITE POTABLE GRADE 25 LTR ES 1419441 (USING FOR MARINE CHEMICAL)	50	LTR	2885.7	57.71	Rotterdam	NETHERLANDS	CHENNAI	SEA
7/21/21	CLOROX DISINFECTING-BLEACH (CLOROMAX)3.57 L/BOTTLE (SODIUM HYPOCHLORITE 6%) (USA MADE)	10	KGS	889.82	88.98	Hong Kong	HONG KONG	CHENNAI	SEA
7/15/21	S0939-500G - SODIUM HYPOCHLORITE PENTAHYDRATE - (LAB CHEMICALS)	10	NOS	15145.66	1514.57	TOKYO	JAPAN	BANGALORE	AIR
7/15/21	S0939-500G - SODIUM HYPOCHLORITE PENTAHYDRATE - (LAB CHEMICALS)	3	NOS	4543.7	1514.57	TOKYO	JAPAN	BANGALORE	AIR
7/15/21	S0939-25G - SODIUM HYPOCHLORITE PENTAHYDRATE - (LAB CHEMICALS)	1	NOS	418.81	418.81	TOKYO	JAPAN	BANGALORE	AIR
7/29/21	S0939-500G - SODIUM HYPOCHLORITE PENTAHYDRATE - (LAB CHEMICALS)	1	NOS	1516.58	1516.58		JAPAN	BANGALORE	AIR
7/29/21	S0939-25G - SODIUM HYPOCHLORITE	1	NOS	419.37	419.37		JAPAN	BANGALORE	AIR

	PENTAHYDRATE - (LAB CHEMICALS)								
7/29/21	S0939-25G - SODIUM HYPOCHLORITE PENTAHYDRATE - (LAB CHEMICALS)	5	NOS	2096.83	419.37		JAPAN	BANGALORE	AIR
7/23/21	SODIUM HYPOCHLORITE POTABLE GRADE PART NO 909001 (600 LTR)	75	KGS	3883.7	51.78	Rotterdam	NETHERLANDS	JNPT	SEA
7/28/21	SODIUM HYPOCHLORITE POTABLE GRADE PART NO 909001 (600 LTR)	50	KGS	2589.13	51.78	Rotterdam	NETHERLANDS	JNPT	SEA
7/29/21	A32319 Sodium hypochlorite solution (DIAGNOSTIC USE KIT / REAGENT TO DIAGNOSIS DISEASE IN HUMAN / PATIENT)	1	PCS	1996.78	1996.78		UNITED STATES	INCJJ6	SEZ
7/14/21	Sodium Hypochlorite solution 6-14	4	LTR	11725.9	2931.475		UNITED STATES	INSBC6	SEZ
8/10/21	239305-25ML SODIUM HYPOCHLORITE SOLUTION G .	4	NOS	5729.26	1432.32	CHICAGO O'HARE INT'L	UNITED STATES	BANGALORE	AIR
8/10/21	239305-25ML SODIUM HYPOCHLORITE SOLUTION G	3	NOS	4129.57	1376.52	CHICAGO O'HARE INT'L	UNITED STATES	BANGALORE	AIR
8/13/21	S0939-25G SODIUM HYPOCHLORITE PENTAHYDRATE - (LAB CHEMICALS)	1	NOS	417.7	417.7	TOKYO	JAPAN	BANGALORE	AIR
8/3/21	SODIUM HYPOCHLORITE (14% CL2) IN AQUEOUS SOLUTION, GPR RECTAPUR (27900.296) (1L X 4) (COO-UK) (CHEMICAL FOR LAB USE FOR	4	KGS	10826.18	2706.54	PARIS - CHARLES DE G	UNITED STATES	DELHI	AIR
8/4/21	L14709.0F Sodium hypochlorite, 11-15% available chlorine	17.5	LTR	13930.44	796.03	MANCHESTER	UNITED KINGDOM	HYDERABAD	AIR
8/18/21	L14709.AP Sodium hypochlorite, 11-15% available chlorine	1	LTR	1374.8	1374.8	MANCHESTER	UNITED KINGDOM	HYDERABAD	AIR
8/25/21	L14709.AP Sodium hypochlorite, 11-15% available chlorine	1	LTR	1359.73	1359.73		UNITED KINGDOM	HYDERABAD	AIR
9/28/21	239305-25ML SODIUM HYPOCHLORITE SOLUTION G	2	NOS	2797.16	1398.58		UNITED STATES	BANGALORE	AIR
9/8/21	L14709.AP Sodium	1	LTR	1342.03	1342.03		UNITED	HYDERABAD	AIR

	hypochlorite, 11-15% available chlorine						KINGDOM		
9/9/21	L14709.APSodium hypochlorite, 11-15% available chlorine	1	LTR	1342.03	1342.03		UNITED KINGDOM	HYDERABAD	AIR
9/15/21	L14709.AP Sodium hypochlorite, 11-15% available chlorine	0.5	LTR	671.02	1342.04		UNITED KINGDOM	HYDERABAD	AIR
9/29/21	L14709.APSodium hypochlorite, 11-15% available chlorine	1	LTR	1356.45	1356.45		UNITED KINGDOM	HYDERABAD	AIR
9/28/21	CLOROX DISINFECTING-BLEACH (CLOROMAX), 3.57 L/BOTTLE (SODIUM HYPOCHLORITE 6%) (USA MADE) (GARMENT WASHING SUPPORTING PUR	3	NOS	878.02	292.67		HONG KONG	CHENNAI	SEA
9/2/21	INNOWATECH AQUADRON PG1-FULLY AUTOMATED PLANT TO PRODUCEA NEUTRAL PH-SODIUM HYPOCHLORITE DISINFECTION SOLUTION W/ASS	1	NOS	6188000	6188000		GERMANY	BANGALORE	ICD

Present Manufacturers

Company Name	Address 1	Address 2	City	State	Pincode	Telephone Number	Fax Number	Email	Web Address
Acuro Organics Ltd.	27, Ασηοκ α Χηαμβε ρ, 5–Β, Ρα φενδρα Π αρκ,	Πυσα Ροαδ, Οππ Ραχηνα Χινεμα,	Νεω Δε ληι	ΝΧΤ οφ Δελη ι				αχχουντ σ≡αχυρ ο.ιν	
Aditya Birla Chemicals (India) Ltd.	ǝΓηανσηψ αμ Κυνφǝ,	Γαρηωα Ροα δ, Π Ο Ρεηλ α,	Παλαμ υ	ϑηαρκ ηανδ				αβχιλ.ιν ϖεστορσ ≡αδιτψα βιρλα.χ ομ	ωωω.αδι τψαβιρλ αχημιχ αλσινδι α.χομ
Ideal Chemicals (India) Pvt. Ltd.	Ροομ Νο.1 9/Δ, 3ρδ Φ λοορ, Λαυ δ Μαινσιο ν,	Αβοϖε ΗΔΦ Χ Βανκ, 21, ΜΚ Μαργ, Ο ππ Χηαρνι Ρ οαδ, Στν.,	Μυμβα ι	Μαηαρ ασητρα				ιδεαλχη εμιχαλ≡ ρεδιφφμ αιλ.χομ	
Lords Chloro Alkali Ltd.	ΣΠ–460, Μ ατσψα Ινδ υστραιαλ Αρεα,		Αλωαρ	Ραφαστ ηαν				σεχρετα ριαλ≡λο ρδσχηλο ρο.χομ	ωωω.λο ρδσχηλο ρο.χομ
Meghmani Finechem Ltd.	Πλοτ Νο.Χ Η/1/ΧΗ/2, Δαηεφ ΓΙΔ Χ Ινδλ.	Εστατε, Οππ. Λυνα Χηεμ ιχαλ, Δαηεφ,	Βηαρυ χη	Γυφαρ ατ				ινφο≡μεγ ημανιφι νεχηεμ. χομ	ωωω.μεγ ημανιφι νεχηεμ. χομ
T G V Sraac Ltd.	Γονδιπαρλ α,		Κυρνοο λ	Ανδηρ α Πραδ εση				σραααχχ ομμ≡νετ σουρχεο νλινε.χο μ	ωωω.τγϖ γρουπ.χ ομ

Raw Materials

The main raw material used for production of the Sodium Hypochlorite (bleach liquor) is Caustic Soda and either liquid chlorine or chlorine gas.

Θυαλιτψ Χοντρολ Ρεθυιρεμεντ

Της ματεριαλ φορ βοτη γραδεσ σηαλλ χομπλψ ωιτη της μινιμυμ αωαιλαβλε χηλορινε χ οντεντ φορ νοτ λεσσ τηαν 30 δαψσ φρομ της δατε οφ ινσπεχτιον ορ δατε οφ δισπατχη ωηιχηεωε ρ ισ εαρλιερ, ατ τηε προδυχερ□σ ενδ. Αφτερ τηε περιοδ οφ μορε τηαν 30 δαψσ, τηε μινιμυμ αωα ιλαβλε χηλορινε φορ βοτη γραδεσ, σηαλλ βε ασ αγρεεδ το βετωεεν τηε πυρχηασερ ανδ τηε συπ πλιερ.

NOTE: – Ασ α γυιδε τηε φολλοωινγ ταβλε ον σταβιλιτψ ισ σηοων:

Αωαιλαβλε Χηλορινε Τραδε	χηλορινε	Ηαλφ λιφε
περχεντ	γ/λ	Δαψσ, 25□Χ
¼	¼ª	º£®ªª
n	nª	®ªª
¤	¤ª	½²ª
º½	º½ª	º©ª
º2	º2ª	ºªª
º©	º©ª	nª

ΤΑΒΛΕ. ΡΕΘΥΙΡΕΜΕΝΤΣ ΦΟΡ ΣΟΔΙΥΜ ΗΥΠΟΧΗΛΟΡΙΤΕ ΣΟΛΥΤΙΟΝ

Σλ. No.	ΧΗΑΡΑΧΤΕΡΙΣΤΙΧ	ΡΕΘΥΙΡΕΜΕΝΤ		ΜΕΤΗΟΔ ΟΦ ΤΕΣΤ
		ΓΡΑΔΕ 1	ΓΡΑΔΕ 2	
(1)	(2)	(3)	(4)	(5)
I)	Ρελατιϖε δενσιτψ ατ 25□Χ	1.07 το 1.18	1.20 Μιν	Α–2
ιι)	Αϖαιλαβλε χηλορινε, περχεντ βψ ϖολυμε	4 το 6	12.5 το 15.0	Α–3
ιιι)	Τοταλ χηλορινε, περχεντ βψ ϖολυμε	40 το 60	125 το 125	Α–4
ιϖ)	Φρεε αλκαλι (ασ ΝαΟΗ), γ/λ Μιν	1.0	5.0	Α–5
ϖ)	Φρεε Σοδιυμ χαρβοναται (ασ $Να_2ΧΟ_3$, γ/λ, Μαξ	5.0	0.5	Α–6
ϖι)	Ιρον (ασ Φε), ππμ, μαξ	0.4	1.0	Α–7
ϖιι)	Σοδιυμ χηλορατε	Τραχεσ	Τραχεσ	Α–8

Manufacturing Process

Raw Materials

Τηε ραω ματεριαλσ υσεδ φορ μακινγ σοδιυμ ηψποχηλοριτε (βλεαχη) αρε χηλορινε, χαυ στιχ□σοδα, ανδ ωατερ.

Materials Processing

Obtaining the Materials

Chlorine is made in liquid form outside the manufacturing facility, and brought to the facility through specially built tank cars with double walls that will not break in case of a derailment. Once the liquid chlorine arrives at the plant, it is pumped from the tank cars into holding vats (tanks used in factories to hold liquids). As a safety precaution, the tank cars also have shutoff valves that stop pumping chlorine if the chlorine detection system goes off. This way, if there was a chlorine leak, it will automatically stop the leak in 30 seconds. Once the chlorine vats are inside the facility, they're put in an enclosed area called a car barn. The car barn contains "air scrubbers", which clean the air of any escaped chlorine gas that can harm humans and the environment. The chlorine gas is later used to react with the caustic soda to create bleach.

Preparing the Components

–⅓ᵛᵀᴸᶠᴺᴸ€⅛ ᴸᶠ¹³⅜⅓ €ᴸᶠ ᴴᵀᶜᴿ¹³⅜ᵛᵀ⅛⅝⅜ ⅓ᴸᶠ ⅓ ⅛¹–⅛⅝–ᴺᴸᶜᴿ⅓ᴺᴸ⅝⅜ ²ª* ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹–£ ᴺᴸ℗⅝– ᴸᶠ℗€ᴴᵀᴴᵀ⅝⅜Pt “ᴺᴸ ᴺᴸ℗⅝ Nº⅓–ᵛᵀ⅞⅓⅛ᴺᴸᵛᵀᶜᴿ€–℠ ⅞⅓⅛€‰€ᴺᴸRs£ ᴺᴸ℗⅝ ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹– €ᴸᶠ ⅜€‰ᵛᵀᴺᴸ⅝⅜ ₩€ᴺᴸ℗ ₩⅓ᴺᴸ⅝ᶜᴿ ᴺᴸ¹ ⅛ᶜᴿ⅝⅓ᴺᴸ⅝ ⅓ –⅝₩ ½²* ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹–Pt –€–⅛⅝ ℗⅝⅓ᴺᴸ €ᴸᶠ ⅛ᶜᴿ⅝⅓ᴺᴸ⅝⅜ ₩℗⅝– ᴺᴸ℗⅝ ₩⅓ᴺᴸ⅝ᶜᴿ ⅜€‰ᵛᵀᴺᴸ⅝ᴸᶠ ᴺᴸ℗⅝ ᴸᶠ¹⁰‰ᵛᵀᴺᴸ€¹–£ €ᴺᴸ €ᴸᶠ ⅛¹¹⁰‰⅝⅜ ⅔⅝⅞¹ᶜᴿ⅝ €ᴺᴸᴸᶠ ᶜᴿ⅝⅓⅛ᴺᴸ€¹–Pt

The Chemical Reaction

Χηλορινε ανδ τηε νεω χαυστιχ σοδα σολυτιον ισ ρεαχτεδ, ωηιχη χρεατεσ σοδιυμ ηψποχηλοριτε. Τηε χηλορινε ισ χιρχυλατεδ τηρουγη τηε χαυστιχ σοδα. Τηε ρεαχτιον ωιλλ ηαππεν ινσταντλψ, ανδ ιτ χαν τακε πλαχε ιν α βατχη οφ 14,000 γαλλονσ, ορ χαν βε δονε ιν α χοντινυουσ ρεαχτορ.

Cooling and Purifying

ff℗⅝ ⅔‰⅝⅛⅛℗ €└F ⅛¹¹‰⅝⅜ ᴺL¹ ᴴTᶜR⅝❂⅝–ᴺL ⅜⅝⅛¹ᴺºᴴT¹└F€ᴺL€¹–£ ⅓–⅜ ᴺL℗⅝– €ᴺL €└F ᴴTⱽTᴺL ᴺL℗ᶜR¹ⱽT℠℗ ⅓ └F⅝ᶜR€⅝└F ¹⅞ ⅞€‰ᴺL⅝ᶜR└F ᴺL¹ ᶜR⅝Nº¹❂⅝ €Nºᴴ TⱽᶜR€ᴺL€⅝└F ᴺL℗⅓ᴺL ⅛⅓– ⅜€└F⅛¹‰¹ᶜR£ ⅜⅝⅛¹ᴺºᴴT¹└F⅝ ¹ᶜR ⅜¹ ⅓–RsᴺL℗€–℠ ⅝‰└F⅝ ᴺL¹ ᴺL℗⅝ ⅔‰⅝⅛⅛℗Pt ‡ᴺL €└F ⅓‰└F¹ ᴺL⅝└FᴺL⅝⅜ ᴺL¹ Nº⅓ᶜu⅝ └FⱽTᶜR⅝ €ᴺL ⅛¹–ᴺL⅓€–└F ⅝₩⅓⅛ᴺL‰Rs ²P₹½²⁎ └F¹³⁄₈€ⱽTNº ℗RsᴴT¹¹⅛℗‰¹ᶜR€ᴺL⅝Pt –⅓⅞⅝ᴺLRs €└F ⅓ ℠ᶜR⅝⅛⅓ᴺL ⅛¹–⅛⅝ᶜR– ⅓ᴺL ᴺL℗⅝ Nº⅓–ⱽT⅞⅛⅓⅛ᴺLⱽTᶜR€–℠ ⅞⅛⅓⅛€‰€ᴺL€⅝└F ⅔⅝⅛⅛⅓ⱽT└F⅝ ¹⅞ ᴺL℗⅝ ᴴTᶜR⅝└F⅝–⅛⅝ ¹⅞ ⱽT–└FᴺL⅓⅔‰⅝ ⅛℗⅝Nº€⅛⅓‰└FPt

Packaging

–¹³⁄₈€ⱽTNº ℗RsᴴT¹¹⅛℗‰¹ᶜR€ᴺL⅝ ⅔‰⅝⅛⅓⅛℗ ₩⅓└F ⅞€ᶜR└FᴺL €–ᴺLᶜR¹³⁄₈ⱽT⅛⅝⅜ ᴺL¹ “Nº⅝ᶜR€⅛⅓–└F €– º¤ª¤ €– └FᴺL⅝⅝‰ ⅛¹–ᴺL⅓€–⅝ᶜR└FPt ‡ᴺL ₩⅓└F ‰⅓ᴺL⅝ᶜR └F¹‰³⁄₈ €– ℠‰⅓└F└F ⅔¹ᴺLᴺL‰⅝└F£ ⅔ⱽTᴺL €ᴺL ₩⅓└F–§ᴺL ⱽT–ᴺL€‰ ᴺL℗⅝ ⅝⅓ᶜR‰Rs º¤ⁿª§└F£ ᴺL℗⅓ᴺL ᴺL℗⅝ ᴴT‰⅓└FᴺL€⅛ ℅ⱽT℠ ₩⅓└F €–ᴺLᶜR¹³⁄₈ⱽT⅛⅝⅜Pt ff℗€└F ⅛℗⅝⅛⅓ᴴT⅝ᶜR£ ‰€℠℗ᴺL⅝ᶜR£ ⅓–⅜ –¹–¥⅔ᶜR⅝⅛⅓℅u⅓⅔⅓‰⅝ ᴴT⅓⅛℅u⅓℠€–℠ ⅓‰ᴺL⅝ᶜR–⅓ᴺL€❂⅝ ᶜR⅝⅜ⱽT⅛⅝⅜ ᴺLᶜR⅓–└FᴴT¹ᶜRᴺL⅓ᴺL€¹– ⅛¹└FᴺL└F£ ᴴTᶜR¹❂€⅜⅝⅜ └F⅓⅞⅝ᴺLRs ᴺL¹ ᴺL℗⅝ ₩¹ᶜR℅u⅝ᶜR└F €–❂¹‰❂⅝⅜ €– └F℗€ᴴTᴴT€–℠ ⅓–⅜ ℗⅓–⅜‰€–℠£ ⅓–⅜ ⅓‰└F¹ ᴴTᶜR¹℗€⅔€ᴺL⅝⅜ ⱽT‰ᴺLᶜR⅓❂€¹‰⅝ᴺL ¡ffiffl¿ ‰€℠℗ᴺL ⅞ᶜR¹Nº ᶜR⅝⅛⅓⅛℗€–℠ ᴺL℗⅝ ⅔‰⅝⅛⅓⅛℗£ ₩℗€⅛℗ €Nºᴴᶜᶜ¹❂⅝⅜ €ᴺL└F ⅛℗⅝Nº€⅛⅓‰ └FᴺL⅓⅔€‰€ᴺLRs ⅓–⅜ ⅝⅞⅞⅝⅛ᴺL€❂⅝–⅝└F└FPt †¹₩⅝❂⅝ᶜR£ €– ᶜR⅝⅛⅝–ᴺL Rs⅝⅛⅓ᶜR└F ᴺL℗€└F ᴴT‰⅓└FᴺL€⅛ ⅔⅝⅛⅛⅓Nº⅝ ⅓– ⅝–❂€ᶜR¹–Nº⅝–ᴺL⅓‰ €└F└FⱽT⅝£ └F¹ –¹₩ ᴺL℗⅝ ⅓Nº¹ⱽT–ᴺL ¹⅞ ᴴT‰⅓└FᴺL€⅛ ⱽT└F⅝⅜ ᴺL¹ ⅛ᶜR⅝⅛⅓ᴺL⅝ ᴺL℗⅝ ᴴT⅓⅛℅u⅓℠€–℠ €└F ᶜR⅝⅜ⱽT⅛⅝⅜£ ⅓–⅜ Nº¹ᶜR⅝ ᶜR⅝⅛Rs⅛‰⅝⅜ ᴴT‰⅓└FᴺL€⅛ €└F ⱽT└F⅝⅜Pt ff℗⅝ ⅞€–€└F℗⅝⅜ └F¹³⁄₈€ⱽTNº

℗Rs HT1⅛℗‰1CR€NL⅝ ⅔‰⅝⅓⅛℗ €LF ⅛1—✪⅝Rs⅝⅜ NL1 ⅓ HT⅓⅛℅€—Ⓜ HT‰⅓—NL 1CR
HT⅓⅛℅⅝⅜ 1—¥LF€NL⅝ €— ½ªª ‰€NL⅝CRLF †‹■› CR1⅛℅⅝NL ⅛⅓CR⅔1RsLFPt

Process Flow Diagram

Buyer's List

Source: CMIE

Contact Details of Buyer's

Company Name	Address 1	Address 2	City	State	Pincode	Telephone Number	Fax Number	Email	Web Address
Advance Paints Pvt. Ltd.	Advance House, Plot A, Makwana Road,	ARK Industrial Compound, Marol Naka, Andheri (East),	Mumbai	Maharashtra	400059	28590162	28528826		
Aeon Formulations Pvt. Ltd.	Plot No. 21, Near Kattabomman Street, Velu Naicker Street,	Venkateswara Nagar, Ramapuram,	Chennai	Tamil Nadu	600089	23860190		ceo@aeonf.com	www.aeonf.com
Aggarsain Spinners Ltd.	2nd Floor, SCO 404,	Sector-20,	Panchkula	Haryana	134116			aggarsainspinners@gmail.com	www.aggarsainspinners.com
Agio Pharmaceuticals Ltd.	A-38, Nandjyot Indl. Estate,	Kurla Andheri Road, Andheri (E),	Mumbai	Maharashtra	400072	28518206	28518204	agio@agio-pharma.com	www.agio-pharma.com
Ameya Laboratories Ltd.	A-49, Madhura Nagar,	Vengal Rao Nagar,	Hyderabad	Telangana	500038	23741677	23741678	ir@anulabs.com	www.anulabs.com
Angeripalayam Common Effluent Treatment Plant Ltd.	S F No. 89, C E T P Garden,	Kanjampalayam, Pitchampalayampudur,	Tirupur	Tamil Nadu	641603	2223169	2222672	acetpl@vsnl.net	
Anirudh Foods Ltd.	B-27/5, D S Ramesh Nagar,	Near Raja Garden,	New Delhi	NCT of Delhi	110027	2362262		optroc@gmail.com	
Aqua-Tech Solutions Pvt. Ltd.	Vinayak 128/1B, Shramikco-op,	Hsg Society, Paud Road,	Pune	Maharashtra	411038	25454524	25458858	admin@aquatech.in	
Arihant Industries Ltd.	B-35, Phase-V, Focal Point,	Dhandari Kalan,	Ludhiana	Punjab	141010	2605865			
Arviva Industries (India) Ltd.	T-15 M I D C Taloja,		Navi Mumbai	Maharashtra		27401232	27412035	admin@harrycollection.com	

Aryan Pumps & Enviro Solutions Pvt. Ltd.	S No.3153, Aryan House, Shree Shivaji Hsg. Co. Op. Soc. Ltd.,	Plot No.18, S B Road, Shivjinagar,	Pune	Maharashtra	411016	25630030	25630032	accounts@aryanpumps.com	www.aryanpumps.com
Bharat Oil & Waste Mgmt. Ltd.	B-5, Ground Floor,	East Of Kailash,	New Delhi	NCT of Delhi	110065	4100710	26216466	mishrag_del@indiatimes.com	www.bharatoil.com
C L C Tanners Association	Shop No.61, Block B, Ground Floor, Shopping Complex,	Calcutta Leather Complex, Karaidanga,	South 24 Parganas	West Bengal	743502				
Calyx Chemicals & Pharmaceuticals Ltd.	Unit No.110, Marwah's Complex, Krishanlal,	Marwah Marg, Off Saki Vihar Road, Andheri (E),	Mumbai	Maharashtra	400072	28571191	66466416	crams@calyxindia.com	www.calyxindia.com
Capital Foods Pvt. Ltd.	Villa Capital, Sadhana Compound,	Near Oshiwara Bridge, S V Road, Jogeshwari (West),	Mumbai	Maharashtra	400102	67740100	67740136	office@capitalfoods.co.in	www.capitalfoods.co.in
Chennai Water Desalination Ltd.	No.330 1, Kattupalli Village, Ennore	Port Road, Minjur Thiruvallur,	Thiruvallur	Tamil Nadu	601203			bs_cs@ivrinfra.com	
Cian Healthcare Ltd.	Milkat No,3339, Block No.1, From South Side,	C S No.227/2+3 A Harpale Park, Opp. Bergerpaint,	Pune	Maharashtra	412308	26982792	26982792	cianhealthcare@yahoo.co.in	www.cian.co.in
Dewas Waterprojects Works Pvt. Ltd.	Welspun House, 7th Floor, Kamala	City, Senapati Bapat Marg, Lower Parel (West),	Mumbai	Maharashtra	400013	66136000	24908020	indu_daryani@welspun.com	www.welspun.com
G R Cables Ltd.	No. 36, Santosh Nagar,	Medhipatnam,	Hyderabad	Telangana	500028	23521246	23521286	grcablesltd@gmail.com	www.grcables.com
Galdhar Foods Pvt. Ltd.	A-89, Shedra M I D C,		Aurangabad	Maharashtra	431005			galdharfoods.monginis@gmail.com	
General Mills India Pvt. Ltd.	902, Ventura,	Hiranandani Business	Mumbai	Maharashtra	400076	40430430	25708949	cs.india@genmill	www.generalmills.

		Park, Powai,						s.com	co.in
Gennova Biopharmaceuticals Ltd.	Emcure House, T-184,	M I D C, Bhosari,	Pune	Maharashtra	411026	40700000	30610111	corporate@emcure.co.in	www.emcure.co.in
Govind Mills Ltd.	67/49, Strand Road,	2nd Floor,	Kolkata	West Bengal	700007				
Highwaymen Collective Pvt. Ltd.	D-201, Mahesh Apts.,	Vasundhara Enclave,	Delhi	NCT of Delhi	110096			info@thehighwaymencollective.com	
Indana Spices & Food Inds. Ltd.	72 Janpath,		New Delhi	NCT of Delhi	110001				
Indian Chemphar Ltd.	Plot No. 218 & 219, Phase-II,	IDA Pashamylaram,	Medak	Telangana	502307	224321		n.niranjan_reddy@yahoo.com	
Interlink Foods Pvt. Ltd.	G-2A,G-05&06,G-26&27, D-1, Rasvilas,	Salcon Saket,District Centre, Saket,	New Delhi	NCT of Delhi	110017	41982300		interlinkfoods@gmail.com	
J C Biotech Pvt. Ltd.	8-2-269/S/3/A, Plot No. 3,	Sagar Society, Road No. 2, Banjara Hills,	Hyderabad	Telangana	500034			info@jcbiotech.com	
J C T Ltd.	Village Chohal,		Hoshiarpur	Punjab	146024	258780	258059	jctsecretarial@jctltd.com	www.jct.co.in
J I T F Water Infra (Naya Raipur) Ltd.	A-1, Upsidc Industrial Area,	Nandgeon Road, Kosi Mathura,	Mathura	Uttar Pradesh	281403	232426		info@jwil.in	
Kaiser Corporation Ltd.	Unit No. 283-287, F Wing, 2nd Floor,	Solaris-I, Saki Vihar Road, Andheri East,	Mumbai	Maharashtra	400072			kaiserpress@rediffmail.com	www.kaiserpress.com
Kanchan India Ltd.	19, 20, Bhilwara Textile Market	Pur Road,	Bhilwara	Rajasthan	311001	247001	247004	kanchanbhl@rediffmail.com	
Kansai Nerolac Paints Ltd.	Nerolac House, Ganpatrao	Kadam Marg, Lower Parel,	Mumbai	Maharashtra	400013	24934001	24936296	investor@nerolac.com	www.nerolac.com
Karnavati Alfa Intl. Ltd.	Survey No.189/1-2, Kailash Indl Est,	Vill Iyava-Vasna, T. Sanand,	Ahmedabad	Gujarat	382170	284233	284231		
Kerala Enviro	Inside Fact	Campus,	Kochi	Kerala	682303	3117937		drnkpillai	

Infrastructure Ltd.	Cochin Division	Ambalamedu,						@gmail.com	
Krebs Biochemicals & Inds. Ltd.	Kothapalli Village,	Kasimkota Mandal, Anakapalli,	Visakhapatnam	Andhra Pradesh	531031			com_sec@krebsbiochem.com	www.krebsbiochem.com
Lactose (India) Ltd.	Survey No. 6 Village Poicha (Rania),	District Savli,	Vadodara	Gujarat	391780	244729		investor.lactose@gmail.com	www.lactoseindia.com
M A C Agro Inds. Ltd. [Merged]	99, Armenian Street,		Chennai	Tamil Nadu	600001				
M T R Foods Pvt. Ltd.	No. 1, II & III Flr, 100 Feet Inner Ring Road,	Ejipura, Ashwini Layout, Viveknagar,	Bengaluru	Karnataka	560047	40812100	26760227	aneesh.k@mtrfoods.com	www.mtrfoods.com
Magic Genie Services Ltd.	O-116, 1st Floor D L F Shopping	Mall, Arjun Marg,	Gurgaon	Haryana	122002			sachin.kumar@a2zemail.com	
Mahavir Green Crop Ltd.	Mahavir Estate, 40, Nr. C T M Mills,	Narol-Naroda High Way, Amraiwadi,	Ahmedabad	Gujarat	380026	25856972		narmadaagroindustries@gmail.com	www.narmadaagroindltd.com
Malviya Chemicals & Pharmaceuticals Pvt. Ltd.	B-67, N D S E-II,		New Delhi	NCT of Delhi	110049	2895310	2895310	info@malviyapharma.com	
Marvel Fashions & Textiles Ltd.	176, Vengaivasal Main Road,	Vengaivasal,	Chennai	Tamil Nadu	601302	2453904	2273914	marfas@giasmd01.vsnl.net.in	
Maxheal Pharmaceuticals (India) Ltd.	301, 3rd Flr, Maxheal House, Plot No.169,	CST No.1043, Bangur Nagar, Goregaon(West),	Mumbai	Maharashtra	400104	67347718		info@maxheal.in	www.goo.gl/maps/dsfgc
N G L Fine-Chem Ltd.	301, E Square Subhash Road,	Vile Parle (East),	Mumbai	Maharashtra	400057	26636450	26108030	cs@nglfinechem.com	www.nglfinechem.com
Nagpur Waste Water Mgmt. Pvt. Ltd.	116A, 11th Floor, Marker Chambers,	VI, 220 Nariman Point,	Mumbai	Maharashtra	400021				
Narmada Ceramics Pvt.	Pertect Refractories	Gwarighat Road,	Jabalpur	Madhya Pradesh	482008	2667231	2663095		

Ltd.	Ltd,Polipathar,	Compound,							
Nath Bio-Genes (India) Ltd.	Nath House, Nath Road,	P B No.318,	Aurangabad (MAH)	Maharashtra	431005	2376314	2376188	investor@nathbiogenes.com	www.nathbiogenes.com
Nestle India Ltd.	100/101, World Trade Centre,	Barakhamba Lane,	New Delhi	NCT of Delhi	110001	23418891	23415130	investor@in.nestle.com	www.nestle.in
Origin Agrostar Ltd.	Global Towers No.79 (New No.183),	T.T.K. Road, V Floor, Alwarpet,	Chennai	Tamil Nadu	600018	24983854	24983139	dsqagro@vsnl.com	
P P G Asian Paints Pvt. Ltd.	6 A, Shanti Nagar,	Santacruz (East),	Mumbai	Maharashtra	400055	30568700	26528044	customercare@asianppg.com	www.ppgasianpaints.com
Pandesara Infrastructure Ltd.	Plot No.195, 2nd Floor, Opp Wintex	Mill Ltd, G I D C Estate, Pandesara,	Surat	Gujarat	394221			pandinfra@drdcs.net	
Patanjali Ayurved Ltd.	D-26, Pushpanjali,	Bijwasan Enclave,	New Delhi	NCT of Delhi	110061			corporate@patanjaliayurved.org	www.patanjaliayurved.org
Pattancheru Enviro-Tech Ltd.	Plot Nos. 23-25, Phase-IV,	I D A, Patancheru,	Medak	Telangana	502319	242705		petltd@rediffmail.com	
R C L Foods Ltd.	Old No.28, New No.16, Ranganathan	Avenue, Kilpauk,	Chennai	Tamil Nadu	600010	48508024		rclfoods@gmail.com	
Radhika Polyesters Ltd.	Survey No. 30, Hissa No.2,	Village Dahivali, Tal. Khalapur,	Raigarh (MAH)	Maharashtra		63458			
Radiant Energy Systems Pvt. Ltd.	Girija 5, Sitabaug Colony,	Vithalwadi Road,	Pune	Maharashtra	411030			mallarlaw@vsnl.net	
Raichem Medicare Pvt. Ltd.	Plot No.24, 25, 26 & 26P, Raichur Industrial	Growth Centre, Chicksugar Village,	Chikmagalur	Karnataka	584134				
Rajshree Spinning Mills Ltd.	338, Avanshi Road,	The Uffizi, Peelamedu,	Coimbatore	Tamil Nadu	641004	4226222	2577929	rscl@rajshreesugars.com	
Ramdev Food Products Pvt. Ltd.	Spice World,Sarkhej Bavla Highway,	Changodar,	Ahmedabad	Gujarat	382213		304205	audit@ramdevfood.com	

Ravi Paints & Chemicals Ltd.	81, Seshachala Gramani Street,	Thiruvottiyur,	Chennai	Tamil Nadu	600019	25992177	25993468		
S E L Manufacturing Co. Ltd.	274,	Dhandari Khurd, G T Road,	Ludhiana	Punjab	141014	7111117	7111118	info@selindia.in	www.selindia.in
Sachin Infra Environment Ltd.	Plot No.PP/2, End Of Road No.2,	Behind Key Tax Processors P. Ltd., G I D C, Sachin,	Surat	Gujarat	394230	2910349		siel_cetp@rediffmail.com	www.sielcetp.in
Sakthi Sugars Ltd.	Sakthi Nagar,	Taluka Bhavani,	Erode	Tamil Nadu	638315	246241		shares@sakthisugars.com	www.sakthisugars.com
Sanofi Healthcare India Pvt. Ltd.	Sanofi House, CTS 117B, L & T Business Park,	Sakhi Vihar Road, Powai,	Mumbai	Maharashtra	400072			info@shanthabiotech.co.in	www.shanthabiotech.com
Santogen Silk Mills Ltd.	Plot A-69, M I D CD Marol Industrial	Area, A Road, Andheri East,	Mumbai	Maharashtra	400093			santogen2001@hotmail.com	
Sanvardhini Agro Pvt. Ltd.	M-14, Addl M I D C,		Satara	Maharashtra	415004	240201	240244	sanvardhini@gmail.com	www.krushitek.com
Sarika Paints Ltd.	4-A, Phase-III, Natraj Indl. Estate,	S-V Highway, Vill: Vasana Lawa,	Ahmedabad	Gujarat	382170	6576440	6578501	classic@ad1.vsnl.net.in	www.sarikapaints.com
Shiva Texfabs Ltd.	No. 8-L, Model Town, Police Station,		Ludhiana	Punjab	141002	4684000	4684010	csstl@shivagroup.info	www.shivagroupindia.com
Sri Bhagirath Textiles Ltd.	Sarvodaya Cloth Market,	Gandhibagh,	Nagpur	Maharashtra	440002	2769035	2765845	info@sbtlindia.com	www.sbtlindia.com
Sri Saravana Mills Pvt. Ltd.	Renganatha puram,	Kasipalayam (PO), Vedasandur (TK),	Dindigul	Tamil Nadu	624711			info@ssm-india.com	
Suven Pharmaceuticals Ltd.	#8-2-334 I SDE Serene Chambers,	6th Floor Road No 5, Avenue 7, Banjara Hills,	Hyderabad	Telangana	500034	23549414	23541152	info@suvenpharm.com	www.suvenpharm.com
Unimarck Pharma (India) Ltd.	S C O No. 264,	Sector No. 32-D,	Chandigarh	Chandigarh	160030	2664151	2669709	unimark.chd@gmail.com	

Valspar (India) Coatings Corpn. Pvt. Ltd.	No. 66-B, Bommasandra Industrial	Area, Hosur Road,	Bengaluru	Karnataka	560099				
Vapi Green Enviro Ltd.	Ist Floor, V I A House,	Plot No. 135, G I D C, Vapi,	Valsad	Gujarat	396195	2428950		admin@vwemcl.com	www.vwemcl.com
Vinod Krushi Prakriya Pvt. Ltd.	Rajendra kamble, Mauli,2nd Floor,	156, Kesarkar Peth,	Satara	Maharashtra	415002			vinodkrushi@hotmail.com	
Vithai Pharmaceuticals Pvt. Ltd.	B-201, Indraprastha Apt., Salvi Wadi,	Marithager Road, Mulund - East,	Mumbai	Maharashtra	400081	21631017		shekharic@rediffmail.com	
Vitthal Corporation Ltd.	Flat No. 104, Suwarnanand Park,	Plot No. 48 49 Laxmi Park, Colony, Navi Peth,	Pune	Maharashtra	411030			vitthalsugarmfg@gmail.com	
Weikfield Foods Pvt. Ltd.	3A, 3rd Floor, Vascon Weikfield	Chambers, Nagar Road,	Pune	Maharashtra	411014			sunil_gijare@weikfield.com	www.weikfield.com
Winsome Yarns Ltd.	S C O 191-192,	Sector 34-A,	Chandigarh	Chandigarh	160022	2603966	4614000	cshare@winsomegroup.com	www.winsomegroup.com

Name of Director(S)

Company Name	Date	Director Name
Advance Paints Pvt. Ltd.	3/31/2012	HARSHAD C SHETH
		MAHENDRA C SHETH
		MANISH N SHETH
Aeon Formulations Pvt. Ltd.	3/31/2020	HASMUKHLAL DHIRAJLAL VORA
		V ARIARASUDHAN
		VAITHEESWARAN PACHAMUTHU AARIAPPA
		VIJAYARANI VAITHEESWARAN
Aggarsain Spinners Ltd.	3/31/21	AJAY GARG
		ASHOK GOEL
		JAGDISH RAI
		PINKY KUMARI (MS.)
		RAMESH KUMAR
		SUNITA RANI
		SUNNY GARG
		SURESH KUMAR KANSAL
		VINEY
Agio Pharmaceuticals Ltd.	3/31/21	MADHUSUDAN RUIA
		MAHENDRA KUMAR KUMAWAT
		RAHGAV SANJAY RUIA
		SNEHA AHUJA
		SUNIL RAJARAM RANE
Ameya Laboratories Ltd.	3/31/2012	A P RAO
		CHAKRAVARTHI SUNDARASHYAM
		K HARI BABU
		K RAJESWAR RAO (DR.)
		M AJAYA KUMAR
		M S S V SATYANARAYANA
		RAVINDRAN PARTHASARATHY
		V S SOMA
Angeripalayam Common Effluent Treatment Plant Ltd.	3/31/21	COIMBATORE BHARATHARAJ BHASKARAN
		JAYAKUMAR VELUSAMY
		KANDASAMY SUBRAMANIAM

		KONDASWAMY AMMASAIAPPAN
		NACHIMUTHU DEIVASIGAMANI
		NATARAJAN
		PALANISAMY EASWARAN
		PALANISAMY MANI
		PALANISAMY SIVASUBRAMANIAM
		SADAYAMPATHY NACHIMUTHU GOUNDER VELUSAMY
		SUNDARAM KARUPPIAH
		VINAYAKAMOORTHY
Anirudh Foods Ltd.	3/31/2020	ROHIT CHAUDHARY
		SANJAY KUMAR AGARWAL
		SAURABH AGARWAL
		SIDHANT SACHDEVA
Aqua-Tech Solutions Pvt. Ltd.	3/31/2020	AJINKYA JOSHI
		AMRITA DESAI
		SUHAS SUDHAKAR JOSHI
Arihant Industries Ltd.	3/31/1999	C P SOTI
		J L BAJAJ
		K L JAIN
		K L NARANG
		N K JAIN
		R K SINGLA
		RAMAN K SOOD
Arviva Industries (India) Ltd.	3/31/2013	BABU IYER
		P H VAIDYA
		PRAKASH MANGLANI
		PRAKASH N AMARNAANI
		RAAJU N AMARNAANI
		S D PRASAD RAO
		SWAPAN MUKHERJEE
Aryan Pumps & Enviro Solutions Pvt. Ltd.	3/31/2020	DEEPA PRASHANT SUTAR
		PRASHANT SUBHASH SUTAR
		UMESH SHRIMANT PATIL
Bharat Oil & Waste Mgmt. Ltd.	3/31/2020	BHAGWAN DAS MANGLANI
		BHARAT MANGLANI
		NARESH MANGLANI
C L C Tanners Association	3/31/21	ABDUL MATIN

		IMRAN AHMED KHAN
		KHURSHID ALAM
		MOHAMMAD FARUK AHAMED
		NADEEM SARWAR
		RAMESH KUMAR JUNEJA
		SATYA PRASAD YADAV
Calyx Chemicals & Pharmaceuticals Ltd.	3/31/2020	AAYUSH SAHEBRAO KHILARI
		ANJALI SAHEBRAO KHILARI
		KHANDU VISHNU VARAL
		VASANT GHISULAL JAIN
Capital Foods Pvt. Ltd.	3/31/21	AJAY GUPTA
		FRANCIS VICTOR CUKIERMAN
		KABIR SAHNI
		VARUN TALUKDAR
		VINIT SHUKLA
Chennai Water Desalination Ltd.	3/31/2020	GORLE SREE CHANDANA
		GOTTIVETI RAMAKRISHNA
		HIMA BINDU MYNENI
		JAIME ORTIZ MOLINA
		S RAMACHANDRAN
		SIVASANKAR REDDY ERAGAMREDDY
		SUBRAHMANYA GOPAL CHEBOLU
Cian Healthcare Ltd.	3/31/21	DEEPAK KHANDELWAL
		MANOJ KUMAR CHUNILAL
		MOHAMMAD RAEES SHEIKH
		MUNJAJI DHUMAL
		PADMANABHAN BALASUBRAMANIAM
		PARESH ARUN SHAH
		RIYAZ B KHAN
		SANTOSH PIMPALKAR SHIVAJI
		SHIKHA RAI
		SMITA KHANNA
		SURAJ SHRINIWAS ZANWAR
		YASHI GUPTA
Dewas Waterprojects Works Pvt. Ltd.	3/31/21	DEVENDRA PATIL
		RAKESH PRASHAD
G R Cables Ltd.	3/31/21	A RANGANAYAKULU

		CH RENUUKA RAO
		G RAGHAVA REDDY
		G V B R REDDY
		HARITHA VARANASI (MS.)
		K LAKSHMI SREE (MRS.)
		P BEENA NAIDU
		RAMAMOHANREDDY YARRAGUDI
Galdhar Foods Pvt. Ltd.	3/31/2020	BALAJI RANGANATH GALDHAR
		NILESH RANGANATH GALDHAR
General Mills India Pvt. Ltd.	3/31/2020	ANINDYA KUNDU
		MIHIR MUKHERJEE
		SALIL MURTHY
		SHIVANGI SHARMA
		SRINIVASULLU NALADALA
Gennova Biopharmaceuticals Ltd.	3/31/21	RUTUJA GOHAD
		SACHIN KAUSHIK
		SANJAY SINGH (DR.)
		SATISH MEHTA
Govind Mills Ltd.	3/31/2006	C P AGRWAL
		DILIP SINGH
		MADHU AGARWAL (MRS.)
		MAYANK AGRWAL
		NITIN KANODI
		P P AGARWAL
		S K AGARWAL
		SHYAM MANOHAR AGARWAL
Highwaymen Collective Pvt. Ltd.	3/31/2020	AKSHAAN GEORGE
		KULDEEP KUMAR DHAR
		VAIBHAV SINGH DESHWAL
Indian Chemphar Ltd.	3/31/2010	A VENUGOPALA REDDY
		B M CHOUDARY (DR.)
		J ANJANEYULU
		S L V PRASAD
Interlink Foods Pvt. Ltd.	3/31/21	PRAVEEN KHANDELWAL
		SANJAY K PATHAK
J C Biotech Pvt. Ltd.	3/31/21	B NAVEEN KRISHNA
		MUKUND M KABRA
		S CHANDRA SEKHAR

		T S S N SIVARAMA PRASAD
		VASUDEVAN LYER
J C T Ltd.	3/31/21	AJIT KUMAR DOSHI (DR.)
		ANAND AGARWAL
		CHANDER MOHAN BHANOT
		PRIYA THAPAR
		RAKESH AGARWAL
		RAMSWAROOP BHURALAL SAMRIA
		SAMIR THAPAR
		SANDEEP SACHDEVA
		V K SINGHAL
J I T F Water Infra (Naya Raipur) Ltd.	3/31/21	ANUJ KUMAR
		ATUL JAIN
		GIAN BANSAL
		PRABJEET SINGH
		PRANAY KUMAR
		VINOD GUPTA
Kaiser Corporation Ltd.	3/31/21	ANAGHA KORDE
		B L ARORA
		LYLA MEHTA
		PRIYANKA CHATURVEDI
		RAJENDRA RAMCHANDRA VAZE
		ROHINTON ERACH DAROGA
Kanchan India Ltd.	3/31/21	DURGESH BANGER
		JAYESH BANGUR
		KRISHAN GOPAL BANGUR
		LADU RAM BANGUR
		MAHAVEER PRASAD C
		MANALI CHATURVEDI
		NILESH BANGER
		SANJAY KABRA
		SIDDARTHA PURSHOTTAM CHANDAK
		VIJAY LAXMI BANGER
Kansai Nerolac Paints Ltd.	3/31/21	ANUJ JAIN
		G T GOVINDARAJAN
		H FURUKAWA
		H HASEBE
		H M BHARUKA

		H NISHIBAYASHI
		NOEL N TATA
		P D PAI
		PRADIP P SHAH
		S TAKAHARA
		SONIA SINGH
		T TOMIOKA
Karnavati Alfa Intl. Ltd.	3/31/2007	BIREN V NANAVATI
		HARSHAD N MEHTA
		HEMANG A SHAH
		KIRIT P MEHTA
		PRAVIN HALVADIA
		PREMJIBHAI P PATEL
Kerala Enviro Infrastructure Ltd.	3/31/21	AMIT M VED
		ARUN CHANDRASEN ASHAR
		ASHOK AMARLAL PANJWANI
		ASHOK KUMAR SHARMA
		GOPALAKRISHNAPILLAI MADHU
		KESAVAN NAMPOOTHIRI
		KUNJUKUNJU GEORGE
		MERIN PHILIP
		MUKUL BHUPENDRA TRIVEDI
		NARAYANANUNNITHAN KUNJUKRISHNA PILLAI
		NITHESH BHASKARAN
		PARAMESHWARAN POOVILLOMNARAYANAN MOOTHATHU
		SUNDER RAMASWAMY BALASUBRAMANIAN
		THELAKKADAN PUTHIYA VEETIL AJITH KUMAR
Krebs Biochemicals & Inds. Ltd.	3/31/21	AVINASH RAVI
		E J BABU
		G V L PRASAD
		MANISH JAIN
		R T RAVI (DR.)
		RAJ KAMAL PRASAD VERMA
		RAVI BABU
		SATISH KHIVSARA
		TANGIRALA MALATI (MRS.)
		TARUNI BANDA (MS)
Lactose (India) Ltd.	3/31/21	ATUL MAHESHWARI

		G K SARDA
		MAHENDRA SINGHI OMPRAKASH
		PRAMOD KALANI
		RITESH PANDEY
		SANGITA MAHESHWARI
		SHYAMSUNDER B TOSHNIWAL
M T R Foods Pvt. Ltd.	3/31/2020	ANEESH KONGOT
		ATLE VIDAR NAGEL JOHANSEN
		CLAES JOHAN WILHELMSSON
		CLAS GORAN HAGSTROM
		ELSE HELENA MARGARETA
		GANESH SHENOY BASAVANAGUDI
		JORDAHL PAUL
		KAROLINE RIIS
		NAKKIM ARE
		SANJAY SHARMA
Magic Genie Services Ltd.	3/31/21	DEVI SINGH
		SUNIL KUMAR
Mahavir Green Crop Ltd.	3/31/2017	BHAGABHAI BHARWAD
		PARAS V SHAH
		RIPAL CHAUHAN (MS.)
		ROKIBHAI VAGHELA
Malviya Chemicals & Pharmaceuticals Pvt. Ltd.	3/31/21	B K MALVIYA
		C R JAIN (SMT.)
		RASHMI MALVIYA
Marvel Fashions & Textiles Ltd.	3/31/2000	B K REDDY
		K R HARIHARAN (CAPT.)
		T V LAKSHMI
Maxheal Pharmaceuticals (India) Ltd.	3/31/2020	HEMLATA MADAN SAKHALA
		MADAN MOHANLAL SAKHALA
		MEHUL MADAN SAKHALA
		PRANITA MEHUL SAKHALA
N G L Fine-Chem Ltd.	3/31/21	A R NACHANE
		J SITARAM
		K V SUBRAMANIAN
		M V SHINDE
		PALLAVI PEDNEKAR

		R J NACHANE
		R N LAWANDE
Nagpur Waste Water Mgmt. Pvt. Ltd.	3/31/2020	ANURAG SHRIVASTAVA
		ARUN HANUMANDAS LAKHANI
		SATYAJEET SURENDRA RAUT
		SIDHAARTHA ARUN LAKHANEE
		SURESHKUMAR MADANLAL AGIWAL
Narmada Ceramics Pvt. Ltd.	3/31/2020	PADMA DEVI MAHESHWARI
		RAJESH MAHESHWARI
Nath Bio-Genes (India) Ltd.	3/31/21	ASHU JAIN
		DEVINDER KHURANA
		DHIRAJ RATHI
		JEEVANLATA NANDKISHOR KAGLIWAL
		KASHINATH IYER
		MADHUKAR DESHPANDE
		OMPRAKASH SHARMA
		SATISH KAGLIWAL
		SHRIRANG AGRAWAL
		SWETA KAGLIWAL
		VADLA NAGABHUSHANAM
Nestle India Ltd.	12/31/21	B MURLI
		DAVID MCDANIEL
		MATTHIAS CHRISTOPH LOHNER
		P R RAMESH
		RAJYA VARDHAN KANORIA
		RAMA BIJAPURKAR
		ROOPA KUDVA
		SURESH NARAYANAN
		SWATI A PIRAMAL
Origin Agrostar Ltd.	3/31/2004	A K SHARMA
		DINESH DALMIA
		K GOPALAKRISHNAN
		M C AGARWAL
		SHREENIVASAN
P P G Asian Paints Pvt. Ltd.	3/31/21	ABBAS MOTORWALA
		JEYAMURUGAN RAMALINGAM
		KUMAR PADMANABHAN
		MAN WAI SIU

		MANISH CHOKSI
		MICHAEL BRUGGER
		RAJIV VIMAL
		REBECCA LIEBERT
		VINCENT ROBIN
Pandesara Infrastructure Ltd.	3/31/21	ASHUTOSH MAHESH KANODIA
		BANSILAL DURLABHBHAI PATEL
		JAIPRAKASH DWARIKAPRASAD AGARWAL
		JITENDRA POPATLAL VAKHARIA
		KAMALVIJAY RAMCHANDRA TULSIAN
		MAHESHCHANDRA DHANSUKHLAL KABUTARWALA
		PRAMOD KUMAR CHHOGMAL CHAUDHARY
		RAJESHKUMAR BALKISHAN PODDAR
		SHYAMSUNDER NANDKISHORE GUPTA
Patanjali Ayurved Ltd.	3/31/21	ACHARYA BALKRISHNA
		AJAY ARYA
		RAKESH MITTAL
		RAM BHARAT
		SUMEDHA
		SWAMI MUKTANAND
		VIGYAN DEEP SHARMA
		YAJ DEV ARYA JI
Pattancheru Enviro-Tech Ltd.	3/31/21	A KRISHNA REDDY
		KAMBAM NITYANANDA REDDY
		RAMAMOHAN RAO DAVULURI
		RAMANA MURTY VENKATA BONDADA
		RANGA RAJU KANUMURI
R C L Foods Ltd.	3/31/2017	GHUMANMAL VIMAL CHAND CHORDIA
		KUSHAL JAIN
		KUSHBU (MS)
		NITESH R LODHA
		PRAMOD KUMAR AGARWAL
		SHREYANS R LODHA
Radiant Energy Systems Pvt. Ltd.	3/31/2015	A V SURESH
		R S MOORTHY
Raichem Medicare Pvt. Ltd.	3/31/21	AGOSTINO BARAZZA
		D MALLA REDDY
		ENZO BARTOLI

		PAOLO OLIGERI
		PRAMOD KUMAR
		VISHNUKANTH BHUTADA CHATURBHUJ
Rajshree Spinning Mills Ltd.	3/31/2014	N MANOHARAN
		RAJASEKARAN MYLSWAMY
		S VALLIAMMAI (SMT.)
		V RAMAMOORTHY
Ramdev Food Products Pvt. Ltd.	3/31/21	HASMUKHBHAI RAMBHAI PATEL
		RUCHIR HASMUKH PATEL
Ravi Paints & Chemicals Ltd.	3/31/2010	S V CHANDRAPANDIAN
		S V KASILINGAM
		S V RAMACHANDRAN
S E L Manufacturing Co. Ltd.	3/31/2019	ASHWANI KUMAR
		DHIRAJ SALUJA
		JOGINDER KUMAR GUPTA
		NAVNEET GUPTA
		NEERAJ SALUJA
		PARAMJIT KAUR (MS.)
		R S SALUJA
		RAHUL KAPOOR
		RANJAN MADAAN
		VINOD KUMAR GOYAL
Sachin Infra Environment Ltd.	3/31/21	AMIT KRISHNA KHURANA
		ANOOP DILBAGRAI JAIN
		BINAY RADHAKISAN AGARWAL
		DINESHKUMAR MUNNILAL AGARWAL
		GIRISH HARBANSLAL SETHI
		MANOJ KUMAR HANSRAJ AGARWAL
		MANOJKUMAR DAGA
		MITUL SHAILESHBHAI MEHTA
		RAHUL VIJAYKUMAR AGARWAL
		RAJESH ISHWARBHAI CHAVDA
		SANJAYKUMAR SUDRANIA
		SATINDER KUMAR JAIN
		VINODKUMAR AGARWAL
		VISHAL SANWARPRASAD BUDHIA
		VISHNUKANT PALIWAL
Sakthi Sugars Ltd.	3/31/21	C R SANKAR

		C RANGAMANI
		JIGAR DALAL
		K V RAMACHANDRAN
		M BALASUBRAMANIAM
		M MANICKAM
		M SRINIVAASAN
		N K VIJAYAN
		P K CHANDRAN
		PRIYA BHANSALI (SMT.)
		S BASKAR
		S CHANDRASEKHAR
		S S MUTHUVELAPPAN
		S.BALASUBHRAMANIAN
Sanofi Healthcare India Pvt. Ltd.	3/31/21	ANNAPURNA DAS (MS.)
		DEEPA SHAH (MS.)
		GIRISH RAGHUNATH DESHMUKH
		KODURU ISWARA VARAPRASAD REDDY
		PRAVEEN KHULLAR
		RAJASEKAR NARAYANASAMY
Santogen Silk Mills Ltd.	3/31/2013	RAJESH KUMAR DEORA
		TARUN NARAYANPRASAD DEORA
		VASUDHA R DEORA
Sanvardhini Agro Pvt. Ltd.	3/31/2020	GIRISH SOMAN
		JALINDAR SHINDE
		PRAKASH SHINDE
Sarika Paints Ltd.	3/31/2006	DHARMESH A SHAH
		GUARANG M SHAH
		KANTILAL M PATEL
		KISHOR DUDHATRA
		MAHENDRABHAI PATEL
		NARESH PATEL
Shiva Texfabs Ltd.	3/31/2020	AKHIL MALHOTRA
		AKHILESH KUMAR TIWARI
		HEM SINGH RATHORE
		MALKEET KAUR
		MANOJ KUMAR
		PRIYA RANI
		SABASTIAN JOSEPH

		UPENDRA LAL
		VIJAY GOYAL
Sri Bhagirath Textiles Ltd.	3/31/2020	ANKUR RATHI
		ANURAAG MAHESHWARY
		MADHUSUDAN BHAGIRATH RANDER
		MANALI ROHIT RANDER
		PRAVEEN MADHUSUDAN RANDER
		RAMESH BHAGIRATH RANDER
		SANDEEP NANDLAL CHANDAK
		SHRADDHA SUNIL KABRA
		SHREEGOPAL MAHESHWARY RANDER
		YOGESH FATTELAL RATHI
Sri Saravana Mills Pvt. Ltd.	3/31/2020	JAIKUMAR KRISHNASAMY
		SINNA MUTHIAH MEIYAPPAN
		VANITHA JAIKUMAR
Suven Pharmaceuticals Ltd.	3/31/21	D G PRASAD
		DEEPANWITA CHATTOPADHYAY (SMT.)
		J V RAMUDU
		JERRY JEYASINGH (DR.)
		K HANUMANTHA RAO
		P SUBBA RAO
		SRIVARI CHANDRASEKHAR
		V SUNDER
		VENKATESWARLU JASTI
Unimarck Pharma (India) Ltd.	3/31/2013	BHUPINDERPAL SINGH BHATIA
		GAGANDEEP BHATIA
		HARSH BHATIA
Valspar (India) Coatings Corpn. Pvt. Ltd.	3/31/21	DENNIS HAROLD KARNSTEIN
		DIVYASWAROOPINI RAVINDRAN
		JAMES MICHAEL DONCHESS
		JEFFREY JAMES MIKLICH
		JOHN THATTUPURACKAL THOMAS
		KEDAR MADHAV TONAPI
Vapi Green Enviro Ltd.	3/31/2020	ANJALI KHAMBETE (MRS.)
		BAJRANG CHHAGANBHAI WARLI
		CHETAN CHANDRAKANT PATEL
		DAYALAN THARA
		GAURANG BAN

		KANU DESAI
		M THENNARASAN
		MAGAN SAVALIA
		MAHESH PANDYA
		P K MINOCHA
		PRAKASHKUMAR HEERALAL BHADRA
		R GNANASEGARAN
		RAJENDRA CHECHANI
		RAJNEESH ANAND
		SAVINDRESINGH SARNA
		SHIRISH B DESAI
		SURESH SHANKERBHAI PATEL
		VINOD D MEHRA
		YOGESH KABARIA
Vinod Krushi Prakriya Pvt. Ltd.	3/31/2020	VAIBHAVI SHRIDHAR JADHAV
		VARSHA SHRIDHAR JADHAV (MRS.)
Vithai Pharmaceuticals Pvt. Ltd.	3/31/21	SAROJ SHEKHAR CHANDORKAR
		SHEKHAR LAXMAN CHANDORKAR
Vitthal Corporation Ltd.	3/31/2019	AJAY AUDUMBAR SHENDE
		BAPURA NARAYAN SHINDE
		NEHA RAJAN REDEKAR
		PRAVIN BHIMRAO PATIL
		SANJAY VITTHALRAO SHINDE
		SAVITA SANJAY SHINDE
		UDDHAV SHRIPATI MALI
		VIJAYKUMAR VITTHALRAO PATIL
		YASHWANT SANJAY SHINDE
Weikfield Foods Pvt. Ltd.	3/31/2020	AKSHAY MUKESH MALHOTRA
		ASHWINI BALDEVRAJ MALHOTRA
		AVANTI ASHWINI MALHOTRA
		BALDEVRAJ SITARAM MALHOTRA
		D S SACHDEVA
		MUKESH SATPAL MALHOTRA
		PARAG PHOOLCHAND SAXENA
		PARDEEP SHARMA
		PRITI MALHOTRA
		YOGESH SATAV
Winsome Yarns Ltd.	3/31/21	AMAN PRIYA (MRS.)

		MANISH BAGRODIA
		MEENU KHANDELWAL (MS.)
		MRIDULA GOYAL (MRS.)
		MUKHTAR SINGH
		RAJIV CHADHA
		SANJAY SHARMA
		TILAK RAJ DEMBLA

Credit Ratings

Company Name	Date	Agency	Instrument	Grade	Rating	Status	Amount	Company/ Issuer not co-operating
							(Rs. Million)	
Aqua-Tech Solutions Pvt. Ltd.	5/10/21	BRICKWORK	Bank Guarantee	Moderate Safety	A 3	Reaffirmed	80	N
		BRICKWORK	Cash Credit	Moderate Safety	BBB+	Reaffirmed	270	N
		BRICKWORK	Term loans	Moderate Safety	BBB+	Reaffirmed	15	N
		BRICKWORK	Working capital loan	Moderate Safety	BBB+	Reaffirmed	44	N
Aryan Pumps & Enviro Solutions Pvt. Ltd.	6/30/21	CRISIL	Bank Guarantee	Moderate Safety	A 3+	Reaffirmed	300	N
		CRISIL	Cash Credit	Moderate Safety	BBB	Reaffirmed	50	N
		CRISIL	Long term Loans	Moderate Safety	BBB	Reaffirmed	100	N
		CRISIL	Overdraft	Moderate Safety	BBB	Reaffirmed	10	N
		CRISIL	Term loans	Moderate Safety	BBB	Reaffirmed	90	N
Dewas Waterprojects Works Pvt. Ltd.	4/21/21	BRICKWORK	Term loans	Moderate Safety	BBB+	Withdrawn		N
Gennova Biopharmaceuticals Ltd.	4/9/21	CRISIL	Fund based financial facility/instrument	Adequate Safety	A	Initial Rating	70	N
		CRISIL	Fund based financial facility/instrument	Adequate Safety	A	Initial Rating	500	N
		CRISIL	Term loans	Adequate Safety	A	Initial Rating	1500	N
		CRISIL	Term loans	Adequate Safety	A	Initial Rating	22.1	N
		CRISIL	Non-fund-based financial facility/instrument	Highest Safety	A 1	Initial Rating	70	N
	5/25/21	CRISIL	Fund based financial facility/instrument	Adequate Safety	A	Reaffirmed	570	N

		CRISIL	Term loans	Adequate Safety	A	Reaffirmed	1522.1	N
		CRISIL	Non-fund-based financial facility/instrument	Highest Safety	A 1	Reaffirmed	70	N
	1/7/2022	CARE	Cash Credit	Adequate Safety	A(CE)	Reaffirmed	1000	N
		CARE	Non-government debt	Adequate Safety	A(CE)/ A1(CE)	Initial Rating	500	N
		CARE	Term loans	Adequate Safety	A(CE)	Reaffirmed	2222.1	N
		CARE	Bank Guarantee	Highest Safety	A 1(CE)	Reaffirmed	70	N
		CARE	Fund based financial facility/instrument	Moderate Safety	BBB	Initial Rating	750	N
		CARE	Term loans	Moderate Safety	BBB	Initial Rating	500	N
	1/28/2022	CRISIL	Fund based financial facility/instrument	Adequate Safety	A+	Upgraded	882.9	N
		CRISIL	Fund based financial facility/instrument	Adequate Safety	A+	Upgraded	117.1	N
		CRISIL	Fund based financial facility/instrument	Adequate Safety	A+	Upgraded	750	N
		CRISIL	Term loans	Adequate Safety	A+	Upgraded	500	N
		CRISIL	Term loans	Adequate Safety	A+	Upgraded	225	N
		CRISIL	Term loans	Adequate Safety	A+	Upgraded	1500	N
		CRISIL	Working capital loan	Adequate Safety	A+	Upgraded	500	N
		CRISIL	Non-fund-based financial facility/instrument	Highest Safety	A 1	Reaffirmed	70	N
J C Biotech Pvt. Ltd.	11/22/21	CARE	Cash Credit	Moderate Safety	BBB+	Downgraded	50	N
		CARE	Working capital loan	Moderate Safety	BBB+	Downgraded	2.2	N
Kanchan India Ltd.	7/1/21	BRICKWORK	Fund based financial facility/instrument	High Safety	A 2	Downgraded	50	Y
		BRICKWORK	Non-fund-based financial facility/instrument	High Safety	A 2	Downgraded	19.2	Y
		BRICKWORK	Fund based financial facility/instrument	Moderate Safety	BBB+	Downgraded	6246.7	Y
Kansai Nerolac Paints Ltd.	6/23/21	CRISIL	Cash Credit	Highest Safety	AAA	Reaffirmed	1580	N
		CRISIL	Commercial paper	Highest	A 1+	Reaffir	300	N

				Safety		med		
		CRISIL	Non convertible unsecured debentures/bonds/ notes/bills	Highest Safety	AAA	Reaffir med	100	N
N G L Fine-Chem Ltd.	12/23/21	ICRA	Letter Of credit	High Safety	A 2	Reaffir med	80	N
		ICRA	Term loans	Moderate Safety	BBB+	Reaffir med	239	N
		ICRA	Working capital loan	Moderate Safety	BBB+	Reaffir med	185	N
	2/28/2022	CRISIL	Letter Of credit	High Safety	A 2	Reaffir med	80	N
		CRISIL	Cash Credit	Moderate Safety	BBB+	Reaffir med	185	N
		CRISIL	Long term Loans	Moderate Safety	BBB+	Reaffir med	4.9	N
		CRISIL	Working capital loan	Moderate Safety	BBB+	Reaffir med	150	N
		CRISIL	Working capital loan	Moderate Safety	BBB+	Reaffir med	25	N
		CRISIL	Working capital loan	Moderate Safety	BBB+	Reaffir med	64	N
Nagpur Waste Water Mgmt. Pvt. Ltd.	8/27/21	IND-RA	Term loans	Adequate Safety	A(ind)	Initial Rating	4250	N
Nath Bio-Genes (India) Ltd.	8/5/21	IND-RA	Working capital loan	Moderate Safety	BBB+(ind)	Rating Watch	900	N
	9/27/21	CRISIL	Cash Credit	Moderate Safety	BBB	Reaffir med	900	N
	3/3/2022	IND-RA	Working capital loan	Moderate Safety	BBB-	Downgraded	900	N
Nestle India Ltd.	12/23/21	CRISIL	Bank Guarantee	Highest Safety	A 1+	Reaffir med	375	N
		CRISIL	Letter Of credit	Highest Safety	A 1+	Reaffir med	1500	N
		CRISIL	Letter Of credit	Highest Safety	AAA	Reaffir med	1750	N
		CRISIL	Long term Loans	Highest Safety	AAA	Reaffir med	1380.1	N
		CRISIL	Overdraft	Highest Safety	AAA	Reaffir med	225	N
		CRISIL	Working capital loan	Highest Safety	AAA	Reaffir med	2669.9	N
P P G Asian Paints Pvt. Ltd.	7/28/21	CRISIL	Working capital loan	High Safety	AA	Reaffir med	700	N
		CRISIL	Bill Purchase / Bill	Highest	A 1+	Reaffir	250	N

			Discounting / Bill negotiation	Safety		med		
Patanjali Ayurved Ltd.	8/12/21	BRICKWORK	Non convertible secured debentures/bonds/ notes/bills	High Safety	AA(CE)	Reaffirmed	1750	N
		BRICKWORK	Non convertible secured debentures/bonds/ notes/bills	High Safety	AA-	Reaffirmed	2500	N
		BRICKWORK	Non convertible unsecured debentures/bonds/ notes/bills	High Safety	AA(CE)	Reaffirmed	3000	N
		BRICKWORK	Term loans	High Safety	AA-	Reaffirmed	24827.7	N
		BRICKWORK	Bank Guarantee	Highest Safety	A 1+	Reaffirmed	1000	N
		BRICKWORK	Commercial paper	Highest Safety	A 1+	Reaffirmed	2000	N
		BRICKWORK	Short-term loan	Highest Safety	A 1+	Initial Rating	2000	N
Ramdev Food Products Pvt. Ltd.	7/5/21	ICRA	Non-fund-based financial facility/instrument	High Safety	A 2	Reaffirmed	165.2	N
		ICRA	Non-government debt	Moderate Safety	BBB+/ A2	Reaffirmed	706.6	N
		ICRA	Term loans	Moderate Safety	BBB+	Reaffirmed	101.9	N
Sri Saravana Mills Pvt. Ltd.	3/9/2022	IND-RA	Term loans	Adequate Safety	A	Reaffirmed	1200	N
		IND-RA	Working capital loan	Adequate Safety	A	Reaffirmed	1400	N

Plant Capacity

Company Name	Product/Raw Material name	Year ended	Capacity	Capacity - Unit	Production	Production - Unit	Sales quantity	Sales quantity - Unit	Sales value
		Date	units		units		units		Rs. Million
Advance Paints Pvt. Ltd.	INDUSTRIAL PAINTS	201203	3000	'000 litres	1047.39	'000 litres	938.26	'000 litres	139.2
	PAINTS	201203			63.74	Tonnes	61.89	Tonnes	
	SERVICE CHARGES	201203							13.2
Aeon Formulations Pvt. Ltd.	FREIGHT CHARGES	202003							0.5
	INTEREST	202003							0.2
	PHARMACEUTICALS PRODUCT	202003							443.3
	SERVICE	202003							2.4
Aggarsain Spinners Ltd.	COMMISSION	202103							17.8
	INTEREST	202103							4.7
	OTHERS	202103							1.4
	TOWELS	202103							68.3
	WASTE & SCRAP	202103							0.2
	YARN	202103							85.9
Agio Pharmaceuticals Ltd.	CHEMICALS PRODUCTS	202103							
	INTEREST	202103							8.7
	PHARMACEUTICALS PRODUCTS	202103							1215.4
Ameya Laboratories Ltd.	2.4 DICHLORO 5 FLUORO ACETOPHENONE	201203							2787.6
Angeripalayam Common Effluent Treatment Plant Ltd.	EFFLUENT TREATMENT	202103							328.5
Anirudh Foods Ltd.	RENT	202103							0.5

	TEXTILE	202103							1369
Aqua-Tech Solutions Pvt. Ltd.	CONTRACTING	201903							938.1
	INTEREST	201903							0.7
	MAINTENANCE OPERATIONS	201903							18.7
	SERVICE CHARGES	201903							9.8
Arihant Industries Ltd.	COTTON YARN	199903	7056	Spindles	270.05	Tonnes	264.8	Tonnes	26.4
	GREY CLOTH	199903	182	Looms	3315.15	'000 metres	6004.07	'000 metres	556.6
	JOB PROCESSING	199903							4.5
	MISCELLANEOUS	199903							0.8
	POLYESTER FILAMENT YARN	199903		Tonnes	63.5	Tonnes	3578.41	Tonnes	598.5
	PROCESSING OF ART SILK FABRICS	199903	7200	'000 metres	2675.23	'000 metres			
	SYNTHETIC TOPS / WOOL TOPS	199903	714	Tonnes	234.66	Tonnes	13.88	Tonnes	2.9
	TEXTURISED YARN	199903	312	Spindles	396	Tonnes	358.89	Tonnes	28.2
	WOOL/SYNTHETIC WASTE	199903			72.99	Tonnes	60.19	Tonnes	0.7
	WORSTED YARN	199903	7200	Spindles	161.27	Tonnes	144.12	Tonnes	42.6
Arviva Industries (India) Ltd.	GARMENTS	201303							11.4
	INTEREST	201303							9.9
	SCRAP	201303							0.4
	SERVICES	201303							44.5
	SYNTHETIC FABRICS	201303							327
	SYNTHETIC FABRICS(TRADING)	201303							231.5
Aryan Pumps & Enviro Solutions Pvt. Ltd.	BULLDOZERS	202003							
	FIRE/DEWATERING PUMPS ETC	202003							

	INTEREST	202003							13.9
	JETTING & RECYCLING	202003							577.8
	PROFIT ON SALE OF INVESTMENTS	202003							10.2
	RENT	202003							1.1
	SEWAGE AND WATERTREATMENT PLANTS N.E.C.	202003							894.6
Bharat Oil & Waste Mgmt. Ltd.	FREIGHT & CARTAGE RECEIVED	201903							19.3
	INTEREST	201903							2.8
	OIL & WASTE MANAGEMENT	201903							29.9
	PROFIT ON MUTUAL FUND	201903							5.1
	TREATMENT,LANDFILL & DISPOSEL CHARGES	201903							272.1
C L C Tanners Association	MEMBERSHIP FEES	202103							1.3
	OPERATION & MAINTENANCE CHARGE	202103							
	OTHER OPERATION & MAINTENANCE CHARGES	202103							
	SERVICE CHARGES	202103							177.9
	SUBSCRIPTIONS RECEIVED	202103							
Calyx Chemicals & Pharmaceuticals Ltd.	CHEMICALS & PHARMACEUTICALS PRODUCT	201903							353.6
Capital Foods Pvt. Ltd.	FOOD PRODUCT	202103					1322.74	'000 cases	6511.6
	INTEREST	202103							3.1
	PROFIT ON SALE OF INVESTMENT	202103							29
	TRADED GOODS	202103							482.7

Chennai Water Desalination Ltd.	BULK WATER	202003							1517.5
	INTEREST	202003							11
Cian Healthcare Ltd.	INTEREST	202103							1.2
	PHARMACEUTICALS MEDICINAL CHEM & BOTANICAL PROD	202103							741.4
Dewas Waterprojects Works Pvt. Ltd.	CONSTRUCTION CONTRACT	202103							23.1
	INCOME FROM OTHER MATERIAL	202103							1.4
	INTEREST	202103							0.1
	WATER SUPPLY CHARGES	202103							103.4
G R Cables Ltd.	AGRICULTURE PRODUCE	201703							0.4
	JELLY FILLED TELECOM CABLES	201703	15000	Lakh core metres					
Galdhar Foods Pvt. Ltd.	FOOD PRODUCTS & BEVERAGES	202003							2.4
General Mills India Pvt. Ltd.	CONSUMER FOOD PRODUCTS	202003							7501.7
	FOOD PRODUCTS (TRADED)	202003							261.4
	GLOBAL BUSINESS SERVICES	202003							3705.2
	INTEREST	202003							2.3
Gennova Biopharmaceuticals Ltd.	INTEREST	202003							12.8
	MEDICAMENTS	202003							2031.9
	MEDICAMENTS (TRADE)	202003							
	SCRAP	202003							0.1
	SERVICES	202003							65.8
Govind Mills	ATTA	200603			5.8	'000	6.22	'000	54.3

Ltd.						tonnes		tonnes	
	BRAN	200603			14.91	'000 tonnes	15.27	'000 tonnes	95.8
	COMMISSION ON AGRO PRODUCTS	200603							61.5
	IRON INGOTS	200603			26.41	'000 tonnes	0.02	'000 tonnes	0.2
	M S INGOTS	200603	26.4	'000 tonnes					
	M S ROUND BAR	200603	26.4	'000 tonnes					
	M.S. BAR	200603							
	MAIDA	200603			46.03	'000 tonnes	48.23	'000 tonnes	454
	MIS.ROLLED BAR	200603			1.01	'000 tonnes	0.03	'000 tonnes	0.4
	REFRECTION	200603					0.02	'000 tonnes	
	ROLLED BAR	200603			23.76	'000 tonnes	23.03	'000 tonnes	376
	RUNNER RISERS	200603			0.59	'000 tonnes	0.03	'000 tonnes	0.4
	SUJI	200603			2.93	'000 tonnes	3	'000 tonnes	28.8
	WHEAT PRODUCTS	200603	198	'000 tonnes					
Highwaymen Collective Pvt. Ltd.	PAPER CONES	202003							189.5
Indana Spices & Food Inds. Ltd.	BASIC SPICES	199209			490.08	Tonnes	380.96	Tonnes	20.2
	FORMULATED SPICES	199209			18.47	Tonnes	18.42	Tonnes	1.7
	OTHER FOOD PRODUCTS & BEVERAGES	199209					9667.6	Tonnes	65.1
	PICKLES	199209			1443.42	Tonnes	1437.83	Tonnes	48.3
	TEA	199209			0.05	'000 tonnes	0.05	'000 tonnes	2.5
Indian Chemphar Ltd.	ANTI-VIRAL INTERMEDIATES	200903	5.75	Tonnes	155.25	Tonnes	155.25	Tonnes	87.6
	CONVERSION CHARGES	200903					7.55	Tonnes	7.5
	OTHERS	200903				Tonnes		Tonnes	
	SEED EXTRACTS	200903				Tonnes		Tonnes	

Interlink Foods Pvt. Ltd.	CEREAL BASED FOOD PRODUCTS	202103	180	'000 tonnes					
	INTEREST	202103							23.8
	LADDU PREMIX	202103			2.04	'000 tonnes			93.6
	MEETHA DALIA	202103			4.2	'000 tonnes			225.5
	NAMKEEN DALIA	202103			4.1	'000 tonnes			224.7
	OTHERS	202103							89.9
	WEANING-FOOD	202103			2.79	'000 tonnes			148.2
J C Biotech Pvt. Ltd.	BIO PHARMACEUTICALS	202003							423.7
	INTEREST	202003							0.5
	SCRAP	202003							0.1
J C T Ltd.	CHIPS (POLYESTER & NYLON)	202103							10.1
	CLOTH	202103							2955.3
	COTTON / BLENDED YARNS	202103							301.8
	INTEREST	202103							12.7
	NYLON FILAMENT YARN	202103							2186.9
	OTHERS	202103							844.4
	PROCESS WASTE/SCRAP	202103							246.2
	PROFIT ON SALE OF PROPERTY, PLANT & EQUIPMENT	202103							39.9
	RENT	202103							8.7
	SUB-CONTRACTING CHARGES	202103							10.5
J I T F Water Infra (Naya Raipur) Ltd.	MAINTENANCE INCOME	201803							25.7
	WATER/WASTE TREATMENT PLANTS &	201803							0.5

	DISTRIBUTION SYSTEM								
Kaiser Corporation Ltd.	CONSULTANCY INCOME	202103							1.9
	OTHERS	202103							
	PAPER LABLES	202103							
	PRINTED ARTICLES	202103							2.3
	SELF ADHESIVE PAPER LABELS	202103							
	TRADED GOODS	202103							
Kanchan India Ltd.	COTTON YARN	202103			27.73	'000 tonnes			
	DENIM	202103			32435	'000 metres	32035.98	'000 metres	2147.3
	FABRIC PROCESSING	202103			51167	'000 metres			
	FABRICS	202103			19961	'000 metres	35768.53	'000 metres	1298.1
	INTEREST	202103							9.5
	PROFIT ON SALE OF INVESTMENT	202103							20.5
	SERVICES	202103							179.4
	SHIRTING	202103			12515	'000 metres			
	TEXTRISING	202103			9.09	'000 tonnes			
	WASTE	202103							135.3
	WOOLEN YARN	202103			1.07	'000 tonnes			
	YARN	202103			26.9	'000 tonnes	31.4	'000 tonnes	5412.1
Kansai Nerolac Paints Ltd.	DIVIDEND	202103							22.4
	INTEREST	202103							51
	PAINTS, VARNISHES & ENAMELS	202103							42570.8
	PAINTS, VARNISHES & ENAMELS (TRADED)	202103							3986.1
	PROFIT ON SALE OF INVESTMENTS	202103							101.2

	SCRAP	202103							154.8
Karnavati Alfa Intl. Ltd.	GOLD BAR	200803					15.76	'000 nos	5
	HDPE/PP BAGS	200803			27.46	Lakh nos	27.41	Lakh nos	15.7
	HDPE/PP BAGS (KGS)	200803			4.25	Tonnes	4.7	Tonnes	0.5
	HDPE/PP WASTAGE	200803			72.59	Tonnes	73.65	Tonnes	0.9
	HDPE/PP WOVEN FABRICS	200803	1500	Tonnes	718.49	Tonnes	215.44	Tonnes	22.7
	HDPE/PPWOVEN CUTPIECE/TAKA	200803			889.45	'000 nos	893.15	'000 nos	20.3
	HDPE/PPWOVEN CUTPIECE/TAKA (KGS)	200803			0.91	Tonnes	3.33	Tonnes	0.3
	JOB WORK INCOME	200803							2.5
Kerala Enviro Infrastructure Ltd.	LAB ANALYSIS & STABILISATION CHARGES	202103							
	TREATMENT OF HAZARDOUS WASTE	202103							116.6
	WATER TRANSPORTATION CHARGES	202103							
Krebs Biochemicals & Inds. Ltd.	FEE FOR PROVIDING MANUFACTURING SERVICES	202103							3.1
	INTEREST	202103							0.7
	JOB WORK SERVICES	202103							137.7
	LEASE RENTALS	202103							10.2
	PHARMACEUTICALS INGREDIENTS	202103							386.1
	SCRAP & RM	202103							5.5
Lactose (India) Ltd.	CONVERSION CHARGES	202103							285
	INTEREST	202103							1.5
	LACTULOSE	202103							58.1
	OTHERS	202103							

	RENT	202103							0.5
	SCRAP SALES	202103							0.7
	SWEET WHEY	202103							
M A C Agro Inds. Ltd. [Merged]	CASHEWNUT	199803	19.28	Tonnes/day	0	Tonnes	0	Tonnes	0
	COFFEE CURED	199803					0.1	'000 tonnes	10
	COFFEE UNCURED	199803			0.54	'000 tonnes	0.47	'000 tonnes	31.9
	CRUDE OIL	199803					1.33	'000 tonnes	31.7
	CYTOZYME (GRANULES)	199803	200	Tonnes	126.05	Tonnes	110.6	Tonnes	2.2
	CYTOZYME (LIQUIDS)	199803	200	'000 litres	114	'000 litres	11.8	'000 litres	0.8
	FERTILISERS	199803					1.72	'000 tonnes	6.2
	FURFURAL	199803	3000	Tonnes	557	Tonnes	559.23	Tonnes	41.3
	INDIAN MADE FOREIGN SPIRIT (IN CASES)	199803	13500	'000 litres	7311.87	'000 litres	7262.1	'000 litres	814.7
	KERNELS	199803					222.53	Tonnes	2.6
	MOLASSES	199803			18.68	'000 tonnes	22.42	'000 tonnes	47.2
	NUTS	199803					236.55	Tonnes	0.9
	OTHERS	199803							7.3
	POTABLE ALCOHOL	199803	3000	'000 litres	1847.46	'000 litres	171.98	'000 litres	2.6
	RBD PALMOLEIN	199803					3.49	'000 litres	99.6
	SPECIALITY CHEMICALS	199803	300	Tonnes	38	Tonnes	46	Tonnes	15.6
	SUGAR	199803	3500	Cane crshd/day (tns)	34.82	'000 tonnes	40.36	'000 tonnes	518.4
M T R Foods Pvt. Ltd.	BEVERAGES	202003							503.3
	CONFECTIONERY	202003							49.7
	INSTANT FOOD MIXES	202003							3033.9
	INTEREST	202003							0.6
	ORAL CARE (TRADE)	202003							20.9
	PICKLES & PAPADS	202003							74.9

	PROFIT ON SALE OF INVESTMENT	202003							29.1
	SCRAP	202003							10.6
	SNACKS (TRADE)	202003							1.4
	SPICE MIX & MASALAS	202003							33.8
	SPICES	202003							372.3
	SPICES & MASALA	202003							3256.4
	VERMICELLI & MACARONI	202003							648.3
	VERMICELLI & MACARONI (TRADE)	202003							173.9
Magic Genie Services Ltd.	INCOME FROM OPERATIONS	202003							6.7
Mahavir Green Crop Ltd.	DE-OILED CAKE	199803	60	'000 tonnes	0	'000 tonnes	0.02	'000 tonnes	0
	OIL	199803	30	'000 tonnes	0	'000 tonnes	0	'000 tonnes	0
	OTHERS (SCRAP)	199803							0.3
Malviya Chemicals & Pharmaceuticals Pvt. Ltd.	INTEREST	202103							0.9
	JOB WORK	202103							7.1
	RENTAL INCOME	202103							1.9
	TABLETS	202103							49.2
Marvel Fashions & Textiles Ltd.	TEXTILE PRODUCT	200103							108
Maxheal Pharmaceuticals (India) Ltd.	INTEREST	202003							2.1
	PHARMACEUTICAL PRODUCTS	202003							677.9
	PHARMACEUTICAL PRODUCTS (TRADED)	202003							26.4
N G L Fine-Chem Ltd.	INTEREST	202103							7.3
	PHARMACEUTICAL BULK DRUGS &	202103							2552.1

	INTERMEDIATES								
	PROFIT ON SALE OF INVESTMENT	202103							51
	TABLETS & SACHETS	202103							
Nagpur Waste Water Mgmt. Pvt. Ltd.	INTEREST	202003							2.5
	O & M OF 100 MLD	202003							556.8
Narmada Ceramics Pvt. Ltd.	AGRICULTURE INCOME	202003							0.2
	REJECTED BRICK SALE	202003							0.1
Nath Bio-Genes (India) Ltd.	COMMERCIAL SEEDS	202103							2660.7
	FARM PRODUCE	202103							1
	FOUNDATION SEEDS	202103							
	INTEREST	202103							12.1
	NUTRITIONAL SUPPLEMENT	202103							306.3
	VEGETABLE SEEDS	202103							89.7
Nestle India Ltd.	CHOCOLATE & CONFECTIONARY	202112					55648	Tonnes	21231.4
	INTEREST	202112							1201.1
	MILK PRODUCTS	202112					134669	Tonnes	62686.3
	OTHER MILK PRODUCTS	202112							
	PREPARED COOKING & COOKING AIDS	202112					327659	Tonnes	45501.3
	SOLUBLE BEVERAGE POWDERS	202112					24.51	'000 tonnes	16918.2
Origin Agrostar Ltd.	ANIMAL FEED	200403		Tonnes					
	DEXTROSE ANHYDROUS	200403		Tonnes					
	DEXTROSE MONOHYDRATE	200403	3300	Tonnes			0	Tonnes	0

	GLUCOSE POWDER	200403	1500	Tonnes					
	HONEY GOLD	200403	900	Tonnes					
	LIQUID GLUCOSE	200403	12000	Tonnes					
	MALTO DEXTRIN	200403	3300	Tonnes					
	TAPIOCA STARCH	200403	26.4	'000 tonnes					
P P G Asian Paints Pvt. Ltd.	GAIN ON SALE OF INVESTMENTS	202103							32.4
	INTEREST	202103							3.8
	PAINTS & COATINGS	202103							10608.4
	SERVICES	202103							41.8
	TRADED GOODS	202103							
Pandesara Infrastructure Ltd.	EFFLUENT TREATMENT	202103							286.5
	INTEREST	202103							4.4
Patanjali Ayurved Ltd.	AYURVEDIC MEDICINES	202103							
	FOOD DIVISION	202103							97838.1
	INTEREST	202103							516.1
	RENT	202103							57.2
Pattancheru Enviro-Tech Ltd.	INTEREST	202003							12.1
	TREATMENT OF PRE-TREATED EFFLUENTS	202003							111
R C L Foods Ltd.	FOOD PRODUCTS	201703							10.9
	INTEREST	201703							1.8
	PROFIT ON SPECULATION	201703							0.7
Radhika Polyesters Ltd.	FABRIC (TRADE)	199803					284	'000 metres	16.5
	PROCESSING CHARGES	199803							9.4
	SYNTHETIC WATERPROOF COATED FABRIC	199803	7000	'000 metres	1584	'000 metres	526	'000 metres	19.8
Radiant Energy Systems Pvt. Ltd.	INCOME FROM SERVICES	201503							11.5

	INTEREST	201503							0.2
	WATER & WASTE WATER TREATMENT PLANTS	201503							62.2
Raichem Medicare Pvt. Ltd.	INTEREST	202103							3
	PHARMACEUTICAL INGREDIENTS	202103							3883.2
Rajshree Spinning Mills Ltd.	AGRICULTURAL INCOME	201403							2.5
	INTEREST	201403							1.1
Ramdev Food Products Pvt. Ltd.	CHILLI POWDER	202103					4450.58	Tonnes	1499.7
	COMPOUNDED ASAFOETIDA	202103					744.46	Tonnes	1192.5
	INTEREST	202103							6
	TURMERIC POWDER	202103					3589.95	Tonnes	728.4
Ravi Paints & Chemicals Ltd.	PAINTS	200503							9.9
S E L Manufacturing Co. Ltd.	COTTON YARN	201903							120.6
	DYED KNITTED CLOTH	201903							28.2
	HOSIERY GARMENTS	201903							57.3
	INTEREST	201903							9.7
	JOB WORK	201903							2145.2
	RAW MATERIAL	201903							0.8
	RENTAL INCOME	201903							2.5
	TERRY TOWEL	201903							2169.1
	WASTE	201903							69.9
Sachin Infra Environment Ltd.	COMMON EFFLUENT TREATMENT PLANT	202103							180.8
	INTEREST	202103							2.3
Sakthi Sugars Ltd.	ASH	202103							0.3

	BAGASSE	202103							457.9
	BAGASSE HANDLING CHARGES	202103							45.4
	BIO EARTH	202103							5.9
	DIVIDEND	202103							0.6
	ETHANOL	202103							2.2
	FERTILISERS	202103							39.3
	FLOUR & FLAKES	202103							
	FUSEL OIL	202103							0.3
	INDUSTRIAL ALCOHOL	202103			16.75	Million litres			924.9
	INTEREST	202103							13
	MAGAZINES	202103							1.2
	POWER	202103			66308000	Kwh	30186000	Kwh	86.4
	PROFIT ON SALE OF INVESTMENTS	202103							30.6
	RENT	202103							15
	SOYA CHUNKS	202103			29.08	'000 tonnes			1890.1
	SOYA MEAL	202103							
	SOYA OIL	202103							
	SOYABEANS	202103							
	SUGAR	202103			87	'000 tonnes			2855.1
	USED MATERIALS	202103							15.4
Sanofi Healthcare India Pvt. Ltd.	INTEREST	202103							174.5
	PHARMACEUTICAL PRODUCTS	202103							15979.1
	SERVICES	202103							1394
Santogen Silk Mills Ltd.	TEXTILE	201303							90.4
Sanvardhini Agro Pvt. Ltd.	AGRO	201903							95.3
	INTEREST	201903							0.1
Sarika Paints Ltd.	PAINTS, ENAMELS, VARNISHES & BLACK	200603	7.6	Tonnes/day	196.88	Tonnes	180.66	Tonnes	18.9

Shiva Texfabs Ltd.	FIBRE & COTTON	202003							
	INTEREST	202003							0.1
	NON WOVEN	202003							
	POY	202003							
	RENTAL INCOME	202003							132.2
	SPINNING & DYEING	202003							5115.1
Sri Bhagirath Textiles Ltd.	COTTON BALES	201803					100892	Bales	1966.8
	COTTON YARN(MFG.)	201803					8978.25	Tonnes	1630.2
	FABRIC YARN	201803					169.82	'000 metres	7.7
	INTEREST	201803							13.1
	SCRAP YARN	201803					1252.43	Tonnes	48.1
	VISCOSE YARN	201803					3989.6	Tonnes	812.9
Sri Saravana Mills Pvt. Ltd.	COTTON FABRICS	202003			10293	Tonnes			826.6
	GARMENTS	202003			26562	'000 nos			2299.7
	INTEREST	202003							9.3
	WASTE	202003							204.1
	YARN	202003			10631	Tonnes			1540.5
	YARN & FABRICS DYING	202003							475.7
Suven Pharmaceuticals Ltd.	FACILITY CHARGES	202103							10.5
	INTEREST	202103							2.7
	PHARMACEUTICALS	202103							9493.3
	SERVICES	202103							461.3
Unimarck Pharma (India) Ltd.	BAR/SAOP	201203							
	CAPSULE	201203							
	INJECTION	201203							
	SYRUP	201203							
	TABLETS	201203							
	TUBES	201203							301.2
Valspar (India) Coatings Corpn. Pvt. Ltd.	COATINGS & RELATED PRODUCTS	202103							1651.9

	COATINGS & RELATED PRODUCTS (TRADE)	202103							871.8
	INTEREST	202103							2.7
Vapi Green Enviro Ltd.	CETP SITE OTHER INCOME	202003							1.2
	CHARGES RECE. FROM NON-MEMBERS	202003							2.8
	CMEE TREATMENT CHARGES	202003							120.3
	DEPOSITORY CHARGES	202003							43.1
	EFFLEUNT TREATMENT CHARGES	202003							369.6
	INTEREST FROM BANK	202003							52.8
	PROFIT ON SALE OF PROPERTY, PLANT AND EQUIPMENT	202003							0.6
	TESTING & OTHER CHARGES	202003							14.5
Vinod Krushi Prakriya Pvt. Ltd.	AGRO PRODUCTS	201603							0.7
	INTEREST	201603							1
Vithai Pharmaceuticals Pvt. Ltd.	LABOUR CHARGES	202103							9.1
	LICENCE SALE	202103							0.3
Vitthal Corporation Ltd.	BAGASSE	201903							
	EXTRA NEUTRAL ALCOHOL	201903			9018	'000 litres	8575	'000 litres	
	GINNING	201903							
	IMPURE SPIRIT	201903							
	INTEREST	201903							12.3
	MOLASSES	201903							
	POWER	201903					1.63	Million kwh	
	RECTIFIED SPIRIT	201903							

	RENT	201903							0.1
	SUGAR	201903			57.1	'000 tonnes	60.7	'000 tonnes	
	TEXTILE	201903			6425	Tonnes	6501	Tonnes	3903.4
Weikfield Foods Pvt. Ltd.	FRESH BUTTON MUSHROOMS	202003					2555.22	Tonnes	302.8
	GENERAL PRODUCTS DIV. (PFD)	202003					11229.87	Tonnes	1513.3
	IMPORTED PRODUCTS DIV. (IPD)	202003					46.43	Tonnes	27.8
	INTEREST	202003							1.1
	ORGANIC FERTILIZER DIV (OFD)	202003					9993.05	Tonnes	11.2
	PROCESSED VEGETABLES & FRUITS (APD OR PVFD)	202003					2129.74	Tonnes	226.1
	PROFIT ON SALE OF INVESTMENTS	202003							5.9
	SCRAP	202003							2.1
	SERVICES	202003							7.1
Winsome Yarns Ltd.	COTTON YARN	202103							51.2
	INTEREST	202103							1.2
	JOB CHARGES	202103							116.4
	KNITWEARS	202103							135.5
	SALE OF SCRAP	202103							0.3
	WASTE	202103							53.7

Location of Plant

Company Name	State	District	Location	Product	Year
Advance Paints Pvt. Ltd.	Gujarat	Bharuch	Ankleshwar	Industrial Paints	3/31/2010
				Paints	3/31/2010
	Maharashtra	Mumbai	Sewree	Industrial Paints	3/31/2010
				Paints	3/31/2010
Aeon Formulations Pvt. Ltd.	Puducherry	Puducherry	Puducherry	Pharmaceuticals Product	3/31/2020
Aggarsain Spinners Ltd.	Haryana	Panipat	Jhattipur	Cotton Yarn	3/31/2008
Agio Pharmaceuticals Ltd.	Maharashtra	Pune	Midc, bhosari	Pharmaceuticals Products	3/31/2019
Ameya Laboratories Ltd.	Telangana	Mahbubnagar	Chilakamarri	2.4 Dichloro 5 Fluoro Acetophenone	3/31/2012
Anirudh Foods Ltd.	NCT of Delhi	NCT of Delhi	Lawrence Road	Atta	3/31/2008
				Bran	3/31/2008
				Cattle Feed	3/31/2008
				Maida	3/31/2008
				Sooji	3/31/2008
Arihant Industries Ltd.	Himachal Pradesh	Solan	Baddi	Cotton Yarn	3/31/1999
				Synthetic Tops / Wool Tops	3/31/1999
				Texturised Yarn	3/31/1999
	Punjab	Ludhiana	Ludhiana	Grey Cloth	3/31/1999
				Polyester Filament Yarn	3/31/1999
				Processing Of Art Silk Fabrics	3/31/1999
				Synthetic Tops / Wool Tops	3/31/1999
				Texturised Yarn	3/31/1999
	Punjab	Ludhiana	Matewara	Grey Cloth	3/31/1999
				Processing Of Art Silk Fabrics	3/31/1999
				Synthetic Tops / Wool Tops	3/31/1999
	Uttar Pradesh	Bulandshahr	Sikandrabad	Worsted Yarn	3/31/1999
Arviva Industries (India) Ltd.		Daman	Daman	Suitings	3/31/2011
	Karnataka	Bangalore	Doddaballapur	Garments & Garments Accessories	3/31/2011

	Maharashtra	Thane	Kudus Wada	Suitings	3/31/2011
Aryan Pumps & Enviro Solutions Pvt. Ltd.	Maharashtra	Pune	Indapur midc	Jetting & Recycling	3/31/2020
Calyx Chemicals & Pharmaceuticals Ltd.	Maharashtra	Thane	Tarapur	Chemicals & Pharmaceuticals Product	3/31/2012
Capital Foods Pvt. Ltd.	Gujarat	Valsad	Bhilad	Food Product	3/31/2020
	Gujarat	Valsad	Kandla	Food Product	3/31/2020
	Gujarat	Valsad	Nahuli	Food Product	3/31/2020
	Maharashtra	Nashik	Nashik	Food Product	3/31/2020
Cian Healthcare Ltd.	Uttarakhand	Hardwar	Bhagwanpur	Pharmaceuticals Medicinal Chem & Botanical Prod	3/31/21
G R Cables Ltd.	Telangana	Mahbubnagar	Rangareddygud a	Jelly Filled Telecom Cables	3/31/2015
Galdhar Foods Pvt. Ltd.	Maharashtra	Aurangabad (MAH)	Shendra	Food Products & Beverages	3/31/2017
General Mills India Pvt. Ltd.	Maharashtra	Mumbai	Vikroli	Oven Cake Mix	4/30/2005
Gennova Biopharmaceuticals Ltd.	Maharashtra	Pune	Hinjawadi	Medicaments	3/31/2020
Govind Mills Ltd.	Uttar Pradesh	Gorakhpur	Gorakhpur	Atta	3/31/2006
				Bran	3/31/2006
				Iron Ingots	3/31/2006
				Maida	3/31/2006
				Mis.Rolled Bar	3/31/2006
				Rolled Bar	3/31/2006
				Runner Risers	3/31/2006
				Suji	3/31/2006
Highwaymen Collective Pvt. Ltd.	Uttar Pradesh	Gautam Buddha Nagar	Noida	Paper Cones	3/31/2020
Indana Spices & Food Inds. Ltd.	Uttar Pradesh	Saharanpur	Dehradun Road	Basic Spices	9/30/1992
				Formulated Spices	9/30/1992
				Pickles	9/30/1992
				Tea	9/30/1992
Indian Chemphar Ltd.	Telangana	Medak	Pashamylaram	Anti-Viral Intermediates	3/31/2009
Interlink Foods Pvt. Ltd.	Jharkhand	Ranchi	Patratu	Cereal Based Food Products	3/31/21
				Laddu Premix	3/31/21
				Meetha Dalia	3/31/21
				Namkeen Dalia	3/31/21

				Weaning-Food	3/31/21
	Uttar Pradesh	Bareilly	Barinagla	Cereal Based Food Products	3/31/21
				Laddu Premix	3/31/21
				Meetha Dalia	3/31/21
				Namkeen Dalia	3/31/21
				Weaning-Food	3/31/21
J C Biotech Pvt. Ltd.	Andhra Pradesh	Prakasam	Prakasam	Bio Pharmaceuticals	3/31/2016
J C T Ltd.	Punjab	Hoshiarpur	Hoshiarpur	Nylon Filament Yarn	3/31/21
	Punjab	Kapurthala	Phagwara	Cloth	3/31/21
Kaiser Corporation Ltd.	Maharashtra	Thane	Pawane	Finished Goods Cloth	3/31/2003
Kanchan India Ltd.	Rajasthan	Bhilwara	Bhilwara	Finish Fabric	3/31/2010
				Narrow Woven Yarn	3/31/2010
				Processed Fabric	3/31/2010
				Woollen Yarn	3/31/2010
				Yarn	3/31/2010
Kansai Nerolac Paints Ltd.	Gujarat	Bharuch	Sayakha	Paints, Varnishes & Enamels	3/31/21
	Haryana	Rewari	Bawal	Paints, Varnishes & Enamels	3/31/21
	Maharashtra	Ratnagiri	Lote Parshuram	Paints, Varnishes & Enamels	3/31/21
	Punjab	Tarn Taran	Goindwal sahib	Paints, Varnishes & Enamels	3/31/21
	Tamil Nadu	Krishnagiri	Hosur	Paints, Varnishes & Enamels	3/31/21
	Uttar Pradesh	Kanpur Dehat	Kanpur Dehat	Paints, Varnishes & Enamels	3/31/21
Karnavati Alfa Intl. Ltd.	Gujarat	Ahmadabad	Sanand	Hdpe/Pp Bags	3/31/2008
				Hdpe/Pp Bags (Kgs)	3/31/2008
				Hdpe/Pp Woven Fabrics	3/31/2008
				Hdpe/Ppwoven Cutpiece/Taka	3/31/2008
				Hdpe/Ppwoven Cutpiece/Taka (Kgs)	3/31/2008
Krebs Biochemicals & Inds. Ltd.	Andhra Pradesh	East Godavari	Kothapalli	Pharmaceuticals Ingredients	3/31/21
	Andhra Pradesh	Nellore	Regadichilaka	Pharmaceuticals Ingredients	3/31/21
Lactose (India) Ltd.	Gujarat	Vadodara	Vadodara	Lactulose	3/31/21
M A C Agro Inds. Ltd. [Merged]	Andhra Pradesh	West Godavari	Elluru	Rbd Palmolein	3/31/1998

	Tamil Nadu	Cuddalore	Mundyampakkam	Cashewnut	3/31/1998
				Coffee Uncured	3/31/1998
				Cytozyme (Granules)	3/31/1998
				Cytozyme (Liquids)	3/31/1998
				Furfural	3/31/1998
				Indian Made Foreign Spirit (In Cases)	3/31/1998
				Molasses	3/31/1998
				Potable Alcohol	3/31/1998
				Speciality Chemicals	3/31/1998
				Sugar	3/31/1998
M T R Foods Pvt. Ltd.	Karnataka	Bangalore	Bommasandra	Hard Ice Creams	3/31/2011
				Instant Food Mixes	3/31/2011
				Spices & Masala	3/31/2011
				Vermicell & Macaroni	3/31/2011
Mahavir Green Crop Ltd.	Gujarat	Bharuch	Bharuch	De-Oiled Cake	3/31/1998
				Oil	3/31/1998
Malviya Chemicals & Pharmaceuticals Pvt. Ltd.	Uttar Pradesh	Ghaziabad	Sahibabad	Tablets	3/31/2018
Marvel Fashions & Textiles Ltd.	Tamil Nadu	Kancheepuram	Maraimalainagar	Textile Product	3/31/2001
Maxheal Pharmaceuticals (India) Ltd.	Maharashtra	Nashik	Satpur	Pharmaceutical Products	3/31/2019
	Maharashtra	Thane	Boisar	Pharmaceutical Products	3/31/2019
N G L Fine-Chem Ltd.	Maharashtra	Mumbai	Mumbai	Pharmaceutical Bulk Drugs & Intermediates	3/31/21
	Maharashtra	Thane	Tarapur, Boisar	Pharmaceutical Bulk Drugs & Intermediates	3/31/21
Nagpur Waste Water Mgmt. Pvt. Ltd.	Maharashtra	Pune	Bhandewadi	O & M Of 100 Mld	3/31/2019
Narmada Ceramics Pvt. Ltd.	Madhya Pradesh	Jabalpur	Jabalpur	Rejected Brick Sale	3/31/2020
Nath Bio-Genes (India) Ltd.	Telangana	Nizamabad	Armoor	Commercial Seeds	3/31/21
Nestle India Ltd.	Goa	North Goa	Bicholim	Chocolate & Confectionary	12/31/21
				Milk Products	12/31/21
				Prepared Cooking & Cooking Aids	12/31/21
				Soluble Beverage Powders	12/31/21
	Goa	North Goa	Ponda	Chocolate & Confectionary	12/31/21

				Milk Products	12/31/21
				Prepared Cooking & Cooking Aids	12/31/21
				Soluble Beverage Powders	12/31/21
	Haryana	Panipat	Samalkha	Chocolate & Confectionary	12/31/21
				Milk Products	12/31/21
				Prepared Cooking & Cooking Aids	12/31/21
				Soluble Beverage Powders	12/31/21
	Himachal Pradesh	Himachal Pradesh	Himachal pradesh	Chocolate & Confectionary	12/31/21
				Milk Products	12/31/21
				Prepared Cooking & Cooking Aids	12/31/21
				Soluble Beverage Powders	12/31/21
	Karnataka	Mysore	Nanjangud	Chocolate & Confectionary	12/31/21
				Milk Products	12/31/21
				Prepared Cooking & Cooking Aids	12/31/21
				Soluble Beverage Powders	12/31/21
	Punjab	Faridkot	Moga	Chocolate & Confectionary	12/31/21
				Milk Products	12/31/21
				Prepared Cooking & Cooking Aids	12/31/21
				Soluble Beverage Powders	12/31/21
	Tamil Nadu	Nilgiri	Cherambadi	Chocolate & Confectionary	12/31/21
				Milk Products	12/31/21
				Prepared Cooking & Cooking Aids	12/31/21
				Soluble Beverage Powders	12/31/21
	Uttarakhand	Uttarakhand	Uttarakhand	Chocolate & Confectionary	12/31/21
				Milk Products	12/31/21
				Prepared Cooking & Cooking Aids	12/31/21
				Soluble Beverage	12/31/21

				Powders	
Origin Agrostar Ltd.	Tamil Nadu	Cuddalore	Cuddalore	Dextrose Monohydrate	12/31/2002
				Glucose Powder	12/31/2002
				Honey Gold	12/31/2002
				Liquid Glucose	12/31/2002
				Malto Dextrin	12/31/2002
				Tapioca Starch	12/31/2002
P P G Asian Paints Pvt. Ltd.	Gujarat	Ahmadabad	Moraiya	Paints & Coatings	3/31/21
	Tamil Nadu	Kancheepuram	Sriperumbudur	Paints & Coatings	3/31/21
Patanjali Ayurved Ltd.	Assam	Assam	Assam	Food Division	3/31/2018
	Haryana	Haryana	Haryana	Food Division	3/31/2018
	Maharashtra	Maharashtra	Maharashtra	Food Division	3/31/2018
	Uttar Pradesh	Uttar Pradesh	Uttar pradesh	Food Division	3/31/2018
	Uttarakhand	Hardwar	Haridwar	Food Division	3/31/2018
	Uttarakhand	Uttarakhand	Bazpur	Food Division	3/31/2018
R C L Foods Ltd.	Tamil Nadu	Chennai	Chennai	Food Products	3/31/2016
Radhika Polyesters Ltd.	Maharashtra	Raigarh (MAH)	Dahivali	Synthetic Waterproof Coated Fabric	3/31/1998
Raichem Medicare Pvt. Ltd.	Karnataka	Raichur	Chicksugur	Pharmaceutical Ingredients	3/31/2020
Rajshree Spinning Mills Ltd.	Tamil Nadu	Coimbatore	Peelamedu	Cotton Yarn	4/30/1998
				Knitted Fabrics	4/30/1998
				Waste	4/30/1998
Ramdev Food Products Pvt. Ltd.	Gujarat	Ahmadabad	Sarkhej-Bavla Highway,Changodar	Chilli Powder	3/31/2010
				Dhana Jiru Powder	3/31/2010
				Dhana Powder	3/31/2010
				Haldi Powder	3/31/2010
				Hing Powder	3/31/2010
Ravi Paints & Chemicals Ltd.	Tamil Nadu	Chennai	Chennai	Paints	3/31/2004
S E L Manufacturing Co. Ltd.	Haryana	Hisar	Hansi	Cotton Yarn	3/31/2019
				Dyed Knitted Cloth	3/31/2019
				Hosiery Garments	3/31/2019
				Terry Towel	3/31/2019
	Madhya Pradesh	Sehore	Sehore	Cotton Yarn	3/31/2019
				Dyed Knitted Cloth	3/31/2019
				Hosiery Garments	3/31/2019
				Terry Towel	3/31/2019

	Punjab	Ludhiana	Ludhiana	Cotton Yarn	3/31/2019
				Dyed Knitted Cloth	3/31/2019
				Hosiery Garments	3/31/2019
				Terry Towel	3/31/2019
	Punjab	Muktsar	Malout	Cotton Yarn	3/31/2019
				Dyed Knitted Cloth	3/31/2019
				Hosiery Garments	3/31/2019
				Terry Towel	3/31/2019
	Punjab	Shahid Bhagat Singh Nagar	Nawanshahar	Cotton Yarn	3/31/2019
				Dyed Knitted Cloth	3/31/2019
				Terry Towel	3/31/2019
	Punjab	Shahid Bhagat Singh Nagar	Nawanshahr	Hosiery Garments	3/31/2019
	Rajasthan	Alwar	Neemrana	Cotton Yarn	3/31/2019
				Hosiery Garments	3/31/2019
				Terry Towel	3/31/2019
Sachin Infra Environment Ltd.	Gujarat	Surat	Sachin	Common Effluent Treatment Plant	3/31/2020
Sakthi Sugars Ltd.	Odisha	Dhenkanal	Haripur	Industrial Alcohol	3/31/21
				Soya Chunks	3/31/21
				Sugar	3/31/21
	Tamil Nadu	Erode	Marchinaicken palayam	Soya Chunks	3/31/21
	Tamil Nadu	Erode	Modakkurichi	Power	3/31/21
				Sugar	3/31/21
	Tamil Nadu	Erode	Sakthi Nagar	Ethanol	3/31/21
				Industrial Alcohol	3/31/21
				Power	3/31/21
				Sugar	3/31/21
	Tamil Nadu	Sivaganga	Sivaganga	Power	3/31/21
				Sugar	3/31/21
Sanofi Healthcare India Pvt. Ltd.	Telangana	Rangareddi	Athevelli (Medichal)	Dtp+Hep-B Vaccnie	3/31/2010
				Erythropoietin	3/31/2010
				Hepatitis B. Vaccine	3/31/2010
				Interferon Alpha 2B Vials	3/31/2010
Santogen Silk Mills Ltd.		Dadra & Nagar Haveli	Dadra & Nagar Haveli	Cloth	3/31/2002

	Gujarat	Bharuch	Ankleshwar	Cloth	3/31/2002
	Maharashtra	Mumbai	Powai	Cloth	3/31/2002
	Maharashtra	Raigarh (MAH)	Patalganga	Cloth	3/31/2002
Sanvardhini Agro Pvt. Ltd.	Maharashtra	Satara	Satara	Agro	3/31/2016
Sarika Paints Ltd.	Gujarat	Ahmadabad	Vasna-Iyava Village	Paints, Enamels, Varnishes & Black	3/31/2006
Shiva Texfabs Ltd.	Punjab	Ludhiana	Ludhiana	Acrylic Yarn	3/31/2011
				Fibre & Cotton	3/31/2011
				Garments & Others	3/31/2011
Sri Bhagirath Textiles Ltd.	Maharashtra	Nagpur	Kalmeshwar	Cotton Yarn(Mfg.)	3/31/2018
				Fabric Yarn	3/31/2018
				Viscose Yarn	3/31/2018
	Punjab	Punjab Districts	Mohali	Cotton Yarn(Mfg.)	3/31/2018
				Fabric Yarn	3/31/2018
				Viscose Yarn	3/31/2018
Sri Saravana Mills Pvt. Ltd.	Tamil Nadu	Tamil Nadu	Tamil Nadu	Cotton Fabrics	3/31/2020
				Garments	3/31/2020
				Yarn	3/31/2020
Suven Pharmaceuticals Ltd.	Andhra Pradesh	Andhra Pradesh	Visakhapatnam	Pharmaceuticals	3/31/21
	Telangana	Telangana	Hyderabad	Pharmaceuticals	3/31/21
	Telangana	Telangana	Sanga Reddy	Pharmaceuticals	3/31/21
	Telangana	Telangana	Suryapet	Pharmaceuticals	3/31/21
Unimarck Pharma (India) Ltd.	Himachal Pradesh	Solan	Baddi	Tubes	3/31/2012
Valspar (India) Coatings Corpn. Pvt. Ltd.	Gujarat	Ahmadabad	Ahmadabad	Industrial Coatings	12/31/2001
				Synthetic Resins	12/31/2001
Vinod Krushi Prakriya Pvt. Ltd.	Maharashtra	Satara	Satara	Agro Products	3/31/2016
Vithai Pharmaceuticals Pvt. Ltd.	Maharashtra	Thane	Rabale (Navi Mumbai)	Pharmaceutical Products	3/31/2019
Vitthal Corporation Ltd.	Maharashtra	Solapur	Madha	Bagasse	3/31/2010
				Extra Neutral Alcohol	3/31/2010
				Impure Spirit	3/31/2010
				Molasses	3/31/2010
				Press Mud	3/31/2010
				Rectified Spirit	3/31/2010
				Sugar	3/31/2010
Weikfield Foods Pvt. Ltd.	Himachal	Solan	Baddi	Fresh Button	3/31/2010

	Pradesh			Mushrooms	
				General Products Div. (Pfd)	3/31/2010
				Imported Products Div. (Ipd)	3/31/2010
				Organic Fertilizer Div (Ofd)	3/31/2010
				Processed Mushrooms	3/31/2010
				Processed Vegetables & Fruits (Apd Or Pvfd)	3/31/2010
	Maharashtra	Pune	Bakori	Fresh Button Mushrooms	3/31/2010
				General Products Div. (Pfd)	3/31/2010
				Imported Products Div. (Ipd)	3/31/2010
				Organic Fertilizer Div (Ofd)	3/31/2010
				Processed Mushrooms	3/31/2010
				Processed Vegetables & Fruits (Apd Or Pvfd)	3/31/2010
	Maharashtra	Pune	Lonikand	Fresh Button Mushrooms	3/31/2010
				General Products Div. (Pfd)	3/31/2010
				Imported Products Div. (Ipd)	3/31/2010
				Organic Fertilizer Div (Ofd)	3/31/2010
				Processed Mushrooms	3/31/2010
				Processed Vegetables & Fruits (Apd Or Pvfd)	3/31/2010
	Maharashtra	Pune	Sanaswadi	Honey	3/31/2010
				Honey Based Products	3/31/2010
Winsome Yarns Ltd.	Punjab	Patiala	Dera Bassi	Cotton Yarn	3/31/21
	Punjab	Sahibzada Ajit Singh Nagar	Mohali	Knitwears	3/31/21

Company Wise Consumption Detail of the Raw Materials

Company Name	Product/Raw Material name	Year Ended	Raw material quantity	Unit of raw material qty	Raw material value
		Date	Units		Rs. Million
Aeon Formulations Pvt. Ltd.	RAW MATERIAL	202003			347.5
Aggarsain Spinners Ltd.	RAW MATERIAL	202103			117.5
	WASTE	202103			0.1
Agio Pharmaceuticals Ltd.	RAW MATERIAL	202103			470.3
Ameya Laboratories Ltd.	RAW MATERIALS	201203			53.9
Angeripalayam Common Effluent Treatment Plant Ltd.	RAW MATERIALS	201903			68
Anirudh Foods Ltd.	RAW MATERIAL	202103			1261.2
Aqua-Tech Solutions Pvt. Ltd.	RAW MATERIAL	201803			94.6
Arihant Industries Ltd.	COTTON	199903	333.42	Tonnes	18.2
	POLYESTER FILAMENT YARN	199903	4333.18	Tonnes	616.8
	SOURED WOOL	199903	8.61	Tonnes	1.2
	SYNTHETIC CLOTH	199903	2805.38	Tonnes	215.2
	SYNTHETIC TOW	199903	80.56	Tonnes	5.6
	WOOL TOPS	199903	225.72	Tonnes	35.1
	YARN (POY)	199903	391.53	Tonnes	26.6
Arviva Industries (India) Ltd.	CHEMICALS	201303			
	FABRICS	201303			
	SYNTHETIC YARN	201303			157.9
	TRIMS & ACCESSORIES	201303			
Aryan Pumps & Enviro Solutions Pvt. Ltd.	RAW MATERIAL	202003			593.2
C L C Tanners Association	POLY ALUMINIUM CHLORIDE 18	202103			4.2
	POLY ELECTROLYTE (POWDER)	202103			0.3
Calyx Chemicals & Pharmaceuticals Ltd.	RAW MATERIAL	201903			98.6
Capital Foods Pvt. Ltd.	RAW MATERIAL	202103			2753.5
Cian Healthcare Ltd.	RAW MATERIALS	202103			281.6
G R Cables Ltd.	RAW MATERIALS	201403			0.5
Galdhar Foods Pvt. Ltd.	RAW MATERIALS	202003			1.4

General Mills India Pvt. Ltd.	RAW MATERIALS	202003			5209
Gennova Biopharmaceuticals Ltd.	RAW MATERIAL	202003			113.6
Govind Mills Ltd.	SCRAP/SPNGE	200603	278810.8	Quintals	324.2
	WHEAT	200603	674274.23	Quintals	535.8
Highwaymen Collective Pvt. Ltd.	RAW MATERIALS	202003			27.3
Indana Spices & Food Inds. Ltd.	CHEMICALS/SALTS	199209	461.61	Tonnes	1.1
	FRUITS & VEGETABLES	199209	1709.72	Tonnes	10.5
	OILS	199209	137.59	Tonnes	4.5
	OTHERS	199209			0.1
	SPICES	199209	539.34	Tonnes	16.4
	TEA	199209	51.74	Tonnes	2.3
Indian Chemphar Ltd.	4-CHLORO BENZHYDRILL PIPERZINE	200903	8.07	Kgs	9.2
	4-DIMETHYLAMINO BUANOAL DIETHYL ACETAL	200903	9100	Kgs	21.9
	4-HYDRAZINE-N-METHYL	200903	8400	Kgs	13.7
	OTHERS	200903	73300	Kgs	22.3
	PARA NITRO BANZYL BROMINE	200903	19.2	Kgs	3.9
	TRIETHYL ORTHO FORMATE	200903	37.18	Kgs	5.8
Interlink Foods Pvt. Ltd.	RAW MATERIALS	202103			601.9
J C Biotech Pvt. Ltd.	AGRICULTURAL PRODUCE	202003			29.6
	DAIRY PRODUCTS	202003			49.8
	OTHERS	202003			16.3
J C T Ltd.	RAW MATERIAL	202103			2687.8
Kaiser Corporation Ltd.	RAW MATERIALS	202103			0.1
Kanchan India Ltd.	RAW MATERIALS	202103			8155.8
Kansai Nerolac Paints Ltd.	RAW MATERIALS	202103			23471.5
Karnavati Alfa Intl. Ltd.	GRANULES, INK, REDUCER	200803	499.4	Tonnes	34.4
Kerala Enviro Infrastructure Ltd.	RAW MATERIAL	201503			0.2
Krebs Biochemicals & Inds. Ltd.	RAW MATERIALS	202103			256.2
Lactose (India) Ltd.	LACTOSE MONOHYDRATE IP/BP	202103			37.7
	OTHERS	202103			
M A C Agro Inds. Ltd. [Merged]	ACID CATALYST	199803	1041	Tonnes	3.1
	BAGASSE	199803	17078	Tonnes	5.8
	BULK MATERIALS	199803	22.44	Tonnes	3.7
	CYTOZYME	199803	975	Litres	0.1
	MOLASSES	199803	9836	Tonnes	14.4

	OTHERS	199803			6.4
	SPECIALITY CHEMICALS	199803			1.5
	SPIRIT	199803	3173814	Litres	6.4
	SUGARCANE	199803	426402	Tonnes	321.9
M T R Foods Pvt. Ltd.	FRUITS, BERRIES, NUTS & SEED & VEGETABLES	202003			368.4
	MILK SOLIDS	202003			512.4
	OTHERS	202003			4
	SPICES & SPICE POWDERS	202003			1250.3
	SUGAR & CHEMICALS	202003			206.9
	VEGETABLE OILS	202003			86.9
	WHEAT RICE PRODUCTS	202003			867.3
Mahavir Green Crop Ltd.	OILCAKE	199609	756	Tonnes	1.4
	SEED	199609	617.08	Tonnes	2.1
Malviya Chemicals & Pharmaceuticals Pvt. Ltd.	RAW MATERIAL	201903			18.7
Marvel Fashions & Textiles Ltd.	RAW MATERIAL	200103			56.7
Maxheal Pharmaceuticals (India) Ltd.	RAW MATERIALS	202003			572.9
N G L Fine-Chem Ltd.	RAW MATERIAL	202103			1006.4
Narmada Ceramics Pvt. Ltd.	LOW FUSING CLAY	200703	3915	Tonnes	1.3
Nestle India Ltd.	RAW MATERIALS	202112			50395.9
Origin Agrostar Ltd.	HONEY	200212	34	Tonnes	2.2
	OTHERS	200212			3.9
	TAPIOCA STARCH POWDER	200212	383	Tonnes	2.8
	TAPIOCA TUBER	200212	3668	Tonnes	6.3
P P G Asian Paints Pvt. Ltd.	RAW MATERIALS	202103			5172.1
Patanjali Ayurved Ltd.	RAW MATERIALS	202103			35947.1
Pattancheru Enviro-Tech Ltd.	DIESEL	202003			2.2
	ELECTRICAL SPARES	202003			0.4
	LAB CHEMICALS	202003			0.6
	MECHANICAL SPARES	202003			0.4
	TREATMENT CHEMICALS	202003			0.7
R C L Foods Ltd.	RAW MATERIALS	201703			8.5
Radhika Polyesters Ltd.	CHEMICALS	199803			4.2
	FABRICS	199803	53	'000 metres	2
	YARN	199803	7550	Kgs	1.3
Radiant Energy Systems Pvt. Ltd.	COMPONENTS & ACCESSORIES	201203			46.3

Raichem Medicare Pvt. Ltd.	RAW MATERIALS	202103			2854.1
Rajshree Spinning Mills Ltd.	COTTON	199804	2002.4	Tonnes	106.2
Ramdev Food Products Pvt. Ltd.	CHILLI	202103			1014.6
	DHANA	202103			179.3
	HALDI	202103			539.8
	HING	202103			174.1
	OTHER	202103			961.1
Ravi Paints & Chemicals Ltd.	EMULSION	200403	24784.8	Kgs	1.4
	M. TURPENTINE	200403	31243.06	Kgs	0.8
	OTHERS	200403	325412.87	Kgs	3.7
	RESINS	200403	51439.1	Kgs	2.9
	T. DIOXIDE	200403	8767.52	Kgs	0.8
S E L Manufacturing Co. Ltd.	RAW MATERIAL	201903			1260.6
Sachin Infra Environment Ltd.	LIME & OTHER CONSUMABLES CONSUMED	202103			15
Sakthi Sugars Ltd.	MOLASSES	202103			99.2
	NEWSPRINT/MAPLITHO/GLAZED PAPER	202103			0.8
	SOYA FLAKES	202103			21.4
	SOYABEAN	202103			1395.1
Sanofi Healthcare India Pvt. Ltd.	RAW MATERIAL	202103			5878.2
Santogen Silk Mills Ltd.	GREY CLOTH	200203	611.83	Metres	39.4
	OTHER YARN	200203	84.95	Tonnes	8.8
Sanvardhini Agro Pvt. Ltd.	RAW MATERIALS	201703			57.2
Sarika Paints Ltd.	EXTENDERS & DRIERS	200603	64.67	Tonnes	0.7
	OTHERS	200603	20.1	Tonnes	0.7
	PIGMENTS	200603	16.8	Tonnes	2.4
	RESINS	200603	38.29	Tonnes	2.5
	SOLVENTS	200603	84.08	Tonnes	3.6
Shiva Texfabs Ltd.	RAW MATERIALS	202003			2542
Sri Bhagirath Textiles Ltd.	COTTON WASTE	201803			16.6
	RAW COTTON	201803			1102.6
	VISCOSE STAPLE FIBER	201803			739.6
Sri Saravana Mills Pvt. Ltd.	COTTON YARN	202003			2676.5
Suven Pharmaceuticals Ltd.	RAW MATERIAL	202103			3059.3
Unimarck Pharma (India) Ltd.	FUSIDIC ACID	201203			
	HYDROCROTISONE	201203			
	HYDROXYPROGESTRONE	201203			15.8

	MECOBALAMINE	201203			
	NANDROLONE DECONOATE	201203			
	OTHERS	201203			
	SODIUM FUSIDATE	201203			
Valspar (India) Coatings Corpn. Pvt. Ltd.	RAW MATERIAL	202103			1103.6
Vapi Green Enviro Ltd.	RAW MATERIAL	202003			85.8
Vinod Krushi Prakriya Pvt. Ltd.	RAW MATERIAL	201603			0.2
Vithai Pharmaceuticals Pvt. Ltd.	RAW MATERIAL	202103			4.6
Vitthal Corporation Ltd.	RAW MATERIALS	201903			2587.6
Weikfield Foods Pvt. Ltd.	RAW MATERIALS	202003			878.6
Winsome Yarns Ltd.	COTTON	202103			49.3
	OTHERS	202103			1.1

Suppliers of Raw Material

CAUSTIC SODA

Oil Base India

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Kashyap Industries

ˢᴹ⅓ᴸᶠ®Rs⅓ᴴᵀ ○⅓€℅ ¡▪ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺL¹ᶜR¿
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fi⅝²⅓ᴸᶠ€ᴺL⅝¾ ®ᴺLᴺLᴴᵀ¾ƒƒ₩₩₩Pt℅⅓ᴸᶠ®Rs⅓ᴴᵀ¥€—⅜ⱽᵀᴸᶠᴺLᶜR€⅝ᴸᶠPt€—

Shreenathji Chemicals
†⅓ᶜᴿ⅜€℅u ff®⅓℅uᶜᴿ⅓ᶜᴿ ¡■ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺᴸ¹ᶜᴿ¿
●ᶜᴿPt †⅓ᶜᴿ⅜€℅uff®⅓℅uᶜᴿ⅓ᶜᴿ
“⅜⅜ᶜᴿ⅝ᴸᶠᴸ¾ ○¹Pt ½ªº£ “–ᴺᴸᶜᴿ€℅uᴸᶠ® —¹Nºᴴᵀ‰⅝₦£ ■ᴴᵀᴴᵀ¹ᴸᶠ€ᴺᴸ⅝ …⅓ᴸᶠ® —¹Nºᴴᵀ‰⅝₦
□¹ᴺᴸᶜᴿ€ ▫¹¹⅓⅜£ ffl⅓⅜¹³⅜⅓ᶜᴿ⅓ ¥ ¼¤ªª½º£ □ⱽᵀ℅⅓ᶜᴿ⅓ᴺᴸ£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¤º¥¤®¤®½¢¢½¼º£ »¤º¥¤¤½ª®º¤®®®
ff⅝‰⅝ᴴᵀ®¹—⅝¾ »¤º¥½ⁿ²¥½¼®ª¤ªⁿ£ »¤º¥½ⁿ²¥½¼®ª¢½²
○⅓₦¾ »¤º¥½ⁿ²¥½¼®ª¤ªⁿ£ »¤º¥½ⁿ²¥½¼®ª¢½²
fi⅝²⅓ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pt ᴸᶠ®ᶜᴿ⅝⅝–⅓ᴺᴸ®‰€⅛®⅝Nº€⅛⅓‰ᴸᶠPt⅛¹Nº

Shri Krishna Enterprises
▫⅓⅛®€ᴺᴸ □ⱽᵀᴴᵀᴺᴸ⅓
“⅜⅜ᶜᴿ⅝ᴸᶠᴸ¾ ½º®£ ˢᴹ⅓ᴺᴸᶜᴿ⅓ ▪⅝ᶜᴿ⅓–£ ff€‰⅓℅u –⅓ᴹᴰ⅓⅓ᶜᴿ£ ˢᴹ®⅓ᶜᴿ€ –⅓¹⁰‰€£
‹⅝‰®€ ¥ ºº³³ⁿ£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¤º¥¤®º®¢ºⁿⁿⁿ½£ »¤º¥¤®º®¢ºⁿ®ⁿ½
ff⅝‰⅝ᴴᵀ®¹—⅝¾ »¤º¥ºº¥¢½ººº®½®
fi⅝²⅓ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pt ᴸᶠ℅u⅝⅛®⅝Nº€⅛⅓‰ᴸᶠPt⅛¹Pt€–

LIQUID CHLORINE

CHENNAI CHLORO SYSTEM

“⅜⅜ᶜR⅝ᴸFᴸF¾ ■ ¢¢£ ff®€ᶜRⱽT⊛⅓‰‰ⱽT⊛⅓ᶜR –ᴺLᶜR⅝⅝ᴺL£ ¤⅓Nº⅓ᴴTⱽTᶜR⅓Nº£
“Nº⅔⅓⅓ᴺLᴺLⱽTᶜR£ —®⅝——⅓€ ¥ ⁿªª ª2¼ ª¢¢—
ff⅝‰¾ ½ⁿ¹½¢¼ⁿ¢¢ ª¢¢ ¥ ½ⁿ¹½¢¼ⁿ¢¢
●¹⅔€‰⅝¾ »¤º ¤®¤¢º ½¼º¢² ƒ ¤®¤ºº ½¤¤¢º
›Nº⅓€‰¾ ⅛®⅝——⅓€⅛®‰¹ᶜR¹”ᶜR⅝⅜€⅞⅞Nº⅓€‰₧⅛¹Nº
›Nº⅓€‰¾ ⅛®⅝——⅓€⅛®‰¹ᶜR¹ᴸF₨ᴸFᴺL⅝Nº”®Nº⅓€‰₧⅛¹Nº
›Nº⅓€‰¾ ⅛®⅝——⅓€⅛®‰¹ᶜR¹”₨Nº⅓€‰₧⅛¹Nº
fi⅝⅔ᴸF€ᴺL⅝¾ ₩₩₩₧⅛®⅝——⅓€⅛®‰¹ᶜR¹₧⅛¹Nº

JAI MARUTI GAS CYLINDERS LTD.

“⅜⅜ᶜR⅝ᴸFᴸF¾ ■‰¹ᴺL ○¹₧ º¼º¥º¼¼£ –‰¹⅛%¥£ ™⅓€ ●⅓ᶜRⱽTᴺL€–®⅓₩⅓–£
†⅓ᶜR€ᴸF®⅓–%⅓ᶜR■ⱽTᶜR⅓Nº£ □₩⅓‰€¹ᶜR ¥ ¢®¢ªª½£ ●⅓⅜®₨⅓ ■ᶜR⅓⅜⅝ᴸF®£ ‡–⅜€⅓
■®¹–⅝¾ª©ªⁿ©ª¤ºª¤½
○⅓₦ ¾¤º¥®²º¥½¼½¢¤½ª
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩₧%⅓€Nº⅓ᶜRⱽTᴺL€®⅓ᴸF⅛₨‰€–⅜⅝ᶜRᴸF‰ᴺL⅜₧⅛¹Nº

International Industrial Gases Limited

“⅜⅜ᶜR⅝ᴸFᴸF¾ fi“⅓€⅜®⅓–¥ff⅝‰⅝®⅓–⅓ ¤¹⅓⅜£ fi⅓€⅜®⅓–£ ●₧■£ ‡–⅜€⅓₧
ff⅝‰⅝ᴴT®¹–⅝¾ »¤º¡®©ª²¿½¼¼½¢¼£ »¤º¡®©ª²¿½¼¼º¢¢
›Nº⅓€‰¾ ₩⅓€⅜®⅓–”€€®⅓ᴸF₧⅛¹Nº
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴTᴸF¾ƒƒ₩₩₩₧€€®⅓ᴸF₧⅛¹Nº

Aggarwal Special Gases

“⅜⅜ᶜR⅝ᴸFᴸF¾ –¥½¤¢£½¤² ¡○¿£ ¤‡‡—■ —®¹₩%£ –†‡fi“‹‡£ ‹‡–ffff₧ “℞fi“¤ ¡¤“™₧¿ ‡○‹‡“
●¹⅔€‰⅝ᴸF¾ ¡»¤º¿ ¤¢º¢½®®²²£ ¡»¤º¿ ¤¢º¼¼ª¼®ⁿ¤
›Nº⅓€‰¾ ⅓®®⅓ᶜR₩⅓‰ᴸFᴴT⅝⅛€⅓‰®⅓ᴸF⅝ᴸF”₨⅓®¹¹₧€–
›Nº⅓€‰¾ ᴸF®ᴸFⱽT⅜⅝ᴸF®®¹₨⅓‰”®Nº⅓€‰₧⅛¹Nº
›Nº⅓€‰¾ ᴸFⱽT⅜⅝ᴸF®”®⅓ᴸF€–⅔®€₩⅓⅜€₧⅛¹Nº
›Nº⅓€‰¾ ᶜR⅓⊛€”®⅓ᴸF€–⅔®€₩⅓⅜€₧⅛¹Nº
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩₧®⅓ᴸF€–⅔®€₩⅓⅜€₧⅛¹Nº

GUJARAT ALKALIES AND CHEMICALS LIMITED

¤⅝®€ᴸFᴺL⅝ᶜR⅝⅜■⅞⅞€⅛⅝⅜¾ ■₧■₧ ¤⅓–¹‰€ – ¼¤º¼²ª£ ‹€ᴸFᴺL₧ ffl⅓⅜¹⅜⅛⅓ᶜR⅓£
□ⱽT%⅓ᶜR⅓ᴺL£ ‡–⅜€⅓₧
■®¹–⅝¾ »¤º ½ⁿ² ⁿººººªªª ƒ ®ºº¤ªªª ¡¤⅝⅛⅝ᴴTᴺL€¹–¿
○⅓₦¾ »¤º ½ⁿ² ⁿººººª¹½
›Nº⅓€‰¾ ⅝₦ᴴT¹ᶜRᴺL”®⅓⅛‰₧⅛¹₧€–£
›Nº⅓€‰¾ ®€ᶜR€%⅓₧ᴴT⅓‰€₩⅓‰”®⅓⅛‰₧⅛¹₧€–
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴTᴸF¾ƒƒ₩₩₩₧®⅓⅛‰₧⅛¹Nº

Grasim Industries Limited

“¾⅜ᶜᴿ⅝ᴸᶠᴸ¾ −€ᶜᴿ‰⅓ᵐᶜᴿ⅓Nº£ ○⅓ᵐ⅜⅓ ¢²ⁿ ¼¼º£ ●⅓⅜®Rs⅓ ▪ᶜᴿ⅓⅜⅝ᴸᶠ®£ ‡–⅜€⅓
ff⅝‰¾ ¤º¥®¼ⁿⁿ¥½¢ⁿ®ⁿª ƒ ½¢ⁿ®ⁿⁿ
○⅓₦¾ ¤º¥®¼ⁿⁿ¥½¢¢ºº¢ ƒ ½¢ⁿª½¢
›Nº⅓€‰¾ ᵐᶜᴿ⅓ᴸᶠ€NºPₜᴸᶠ⅝⅛ᶜᴿ⅝ᴺᴸ⅓ᶜᴿ€⅓‰”⅓⅜€ᴺᴸRs⅓⅔€ᶜᴿ‰⅓Pₜ⅛¹Nº
fi⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀᴸᶠ¾ƒƒ₩₩₩Pₜᵐᶜᴿ⅓ᴸᶠ€NºPₜ⅛¹Nº

Sree Rayalaseema Alkalies

“¾⅜ᶜᴿ⅝ᴸᶠᴸ¾ ¢ª¥¼ª¢£ ½–⅜ ○‰¹¹ᶜᴿ£ ˢᴹᶜᴿ€ᴸᶠ®–⅓ ™Rs¹ᴺᴸ®ᴸᶠ–⅓ —¹Nºᴴᵀ‰⅝₦£
–®⅓ᵐRs⅓–⅓ᵐ⅓ᶜᴿ£ ˢᴹᵛᵀᶜᴿ–¹¹‰¥²º©ªª¢ ¡“Pₜ▪Pₜ¿
▪®¹–⅝¾ ª©²º©¥½®¤ⁿª½ ƒ ª¼£ ½½ºα¼¼ƒªªⁿ¤
○⅓₦¾ ª©²º©¥½½ⁿ¤®¼ ƒ ½½½®¢²
›Nº⅓€‰¾ ᴺᴸᵐ❂⅝₦ᴴᵀ¹ᶜᴿᴺᴸ”ᴺᴸᵐ❂Nº⅓€‰PₜⅠ–⅝ᴺᴸ£
›Nº⅓€‰¾ ᴸᶠᶜᴿ⅓⅓⅛⅛ᴸᶠ⅜”ᴺᴸᵐ❂Nº⅓€‰PₜⅠ–⅝ᴺᴸ£
›Nº⅓€‰¾ ᴸᶠᶜᴿ⅓⅓⅛ᴺᴸᵐ❂”ᵐNº⅓€‰Pₜ⅛¹Nº£
›Nº⅓€‰¾ ᵐ¹ᴴᵀ€⅛®⅓–⅜”ᴺᴸᵐ❂Nº⅓€‰Pₜ–⅝ᴺᴸ
fi⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀᴸᶠ¾ƒƒ₩₩₩Pₜᴺᴸᵐ❂ᵐᶜᴿ¹ᵛᵀᴴᵀPₜ⅛¹Nº

HDPE ROCKET CARBOYS

Pyramid Technoplast Pvt. ltd.
“¾⅜ᴸR⅝ᴸFᴸF¾ ■⅞⅞€⅛⅝ ○¹Pt½£ –⅝⅛¹–⅜ ○‰¹¹ᴸR£ –®⅓® ffᴸR⅓⅜⅝ –⅝–ᴺL⅝ᴸR£ ¤⅓–€
–⅓ᴺL€ ●⅓ᴸR®£○ᴸR fi⅝ᴸFᴺL⅝ᴸR– ›₦ᴴTᴸR⅝ᴸFᴸF †€®®₩¹⅓Rs£ ●⅓‰⅓⅜ ›⅓ᴸFᴺL£ ●ᵛTNº⅔⅓€ ¥
¢ªªª¤®£ ●⅓®⅓ᴸR⅓ᴸF®ᴺLᴸR⅓£ ‡–⅜€⅓
–¹–ᴺL⅓⅛ᴺL ¾ ¤º¥½½¥¢½®ⁿº²ªª
›¥Nº⅓€‰ ¾ ᴴTᵛTᴸR⅛®⅓ᴸF⅝”ᴴTRsᴸR⅓Nº€⅜ᴺL⅝⅛®–¹ᴴT‰⅓ᴸFᴺLPt⅛¹Nº
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒᴴTRsᴸR⅓Nº€⅜ᴺL⅝⅛®–¹ᴴT‰⅓ᴸFᴺLPt⅛¹Nº

Ganesh Corporation
“¾⅜ᴸR⅝ᴸFᴸF¾ ■‰¹ᴺL ○¹¾ “º¥ ²½¢ª£ “–%‰⅝ᴸF®₩⅓ᴸR □‡‹–£ “–%‰⅝ᴸF®₩⅓ᴸR ¥
¼¤¼ªª¹½£ ¡□ᵛT%⅓ᴸR⅓ᴺL¿ ‡○‹‡“Pt
₩₩₩Pt®⅓–⅝ᴸF®⅛¹ᴸRᴴT¹ᴸR⅓ᴺL€¹–Pt€–
›¥Nº⅓€‰ ¾ ⅛¹–ᴺL⅓⅛ᴺL”®⅓–⅝ᴸF®⅛¹ᴸRᴴT¹ᴸR⅓ᴺL€¹–Pt€–
ff⅝‰¾ »¤º¥½ⁿ¢ⁿ¥½½®®®¤
●¹⅔€‰⅝¾ »¤º¥¤¼®ⁿº¥©ⁿ¼©¼

Apollo Industries
“¾⅜ᴸR⅝ᴸFᴸF¾ ¼¤£ ffᴸR€NºᵛTᴸRᴺLRs£ ff⅝%ᴴT⅓‰ –⅛®⅝Nº⅝£ ¤¹⅓⅜ ○¹Pt¼£ ffl€‰⅝
■⅓ᴸR‰⅝ ¡›⅓ᴸFᴺL¿£ ●ᵛTNº⅔⅓€ ¥ ¢ªªª²®
ff⅝‰¾ »¤º ©¢½¢ª¹¼ª²ªⁿ
›Nº⅓€‰¾ €–⅞¹”⅓ᴴT¹‰‰¹€–⅜ᴸFPt⅛¹Nº
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ⅓ᴴT¹‰‰¹€–⅜ᴸFPt⅛¹Nºƒ

GayatriPlasticans
“¾⅜ᴸR⅝ᴸFᴸF¾ ²¼£ ■⅓ᴸRNº⅝ᴸF®₩⅓ᴸR ›ᴸFᴺL⅓ᴺL⅝ ■ᴴTᴴTPt ■Nº%⅓ᴸR ᴺL⅝₦ᴺL€‰⅝£
●⅝Nº⅛¹£ ○⅓ᴸR¹⅜⅓ ¤¹⅓⅜£ “®Nº⅝⅜⅓⅔⅓⅜ ¥ ¼©ªª¹½²£ ‡–⅜€⅓
■®¹–⅝¾ ª®¤¥½½½ª½©º®
fi⅝⅔ᴸF€ᴺL⅝¾ ₩₩₩Pt®⅓Rs⅓ᴺLᴸR€ᴴT‰⅓ᴸFᴺL€⅛⅓–ᴸFPt⅛¹Nº
›¥Nº⅓€‰ ¾ ®⅓Rs⅓ᴺLᴸR€ᴴT‰⅓ᴸFᴺL”®Nº⅓€‰Pt⅛¹Nº

BIC Chemicals & Packaging Pvt. Ltd.
“¾⅜ᴸR⅝ᴸFᴸF¾ □ – º¤ƒ² ●‡‹– ff⅓ᴸR⅓ᴴTᵛTᴸR ‡–⅜ᵛTᴸFᴺLᴸR€⅓‰ “ᴸR⅝⅓£ ‹€ᴸFᴺL – ff®⅓–⅝Pt
●⅓®⅓ᴸR⅓ᴸF®ᴺLᴸR⅓ – ¢ª°²ªⁿ ‡–⅜€⅓Pt
ff⅝‰¾ »¤º ¡ª¿ ½²½² ⁿⁿºª²¼
›¥Nº⅓€‰ ¾ ᴸF⅓‰⅝ᴸF”⅔€⅛⅛ᴴTᴴT‰Pt⅛¹Nº
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴTᴸF¾ƒƒ⅔€⅛⅛ᴴTᴴT‰Pt⅛¹Nºƒ

Scoya Pharmatech
‹®⅓ᴸRNº⅝ᴸF® –®⅓® ¡–⅝¹¿
“¾⅜ᴸR⅝ᴸFᴸF¾ –₩⅓ᴸFᴺL€% ‹€ᴸF⅓ –¹ᴸRᴴT¹ᴸR⅓ᴺL⅝ ■⅓ᴸR%£ ■⅞⅞€⅛⅝ ○¹ ½ª¢£
–⅓–®®⅓–€ ›ᴸFᴺL⅓ᴺL⅝£ ■ᴴTᴴT –®ᴸR⅝Rs⅓ᴸF ᴺL⅓‰%€⅝ᴸF£ ₧–– ●⅓ᴸR®£ □®⅓ᴺL%¹ᴴT⅓ᴸR –
fi⅝ᴸFᴺL ●ᵛTNº⅔⅓€ ¥ ¢ªªª©ⁿ£ ●⅓®⅓ᴸR⅓ᴸF®ᴺLᴸR⅓£ ‡–⅜€⅓
●¹⅔€‰⅝¾ »¡¤º¿¥¤©ⁿ®º¤º¤¢²ƒ »¡¤º¿¥¤©ⁿ®º¼¼¼²²
ff⅝‰⅝ᴴT®¹–⅝¾ »¡¤º¿¥¡½½¿¥¢ª¹½¼¢¢½¢
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩PtᴸF⅛¹Rs⅓ᴴT®⅓ᴸRNº⅓ᴺL⅝⅛®Pt€–

Vinis Products Pvt. Ltd.
–⅓–℅⅓₨ –℗⅓® ¡‹€ᶜᵣ⅝⅛ᴺ└¹ᶜᵣ¿
“⅜⅜ᶜᵣ⅝└ꜰ└ꜰ¾ —¥¢¢£ ¼ᶜᵣ⅜ ○‰₀₀¹¹ᶜᵣ£ ▫¹₨⅓‰₀ ‡–⅜ⱽ┬└ꜰᴺ└ᶜᵣ€⅓‰₀ ›└ꜰᴺ└⅓ᴺ└⅝£ ○⅓€℠⅓ⱽ┬№ —ᶜᵣ¹└ꜰ└ꜰ ▫¹¹⅓⅜£ fi⅓⅜⅛⅓‰₀⅓
●ⱽ┬N²²⅓⅓€ ¥ ¢ªªª¼º£ ●⅓℗⅓ᶜᵣ⅛⅓└ꜰ℗ᴺ└ᶜᵣ⅛⅓£ ‡–⅜€⅓
●¹²⅓€℅₀₀⅝⅜ »¡¤º¿¥¤℗¼¼℗¼¤¢¤¤
ff⅝℅₀₀⅝ᴴ┬℗¹–⅝⅜ »¡¤º¿¥¡½½¿¥½¢º¢¤¢¤¤¤ƒ »¡¤º¿¥¡½½¿¥ⁿ²©ª©©¤¤
○⅓₦⅜ »¡¤º¿¥¡½½¿¥½¢º℗¼®¤¤
fi⅝²⅓└ꜰ€ᴺ└⅝⅜ ℗ᴺ└ᴺᴴ┬⅜ƒƒ₩₩₩P₹❂€–€ᴴ┬ⱽ┬Nº ᴴ┬P₹⅛¹Nº

Madarwala Enterprise
™ⱽ┬ᴹᴰ⅝ᶜᵣ ●⅓⅜⅛⅓ᶜᵣ₩⅓‰₀⅓ ¡—›■¿
“⅜⅜ᶜᵣ⅝└ꜰ└ꜰ¾ ○¹P₹ ½ª¢£ ●€ᴺ└ᴺ└⅓℅₀ —℗⅓Nº²⅔⅝ᶜᵣ£ ○¹P₹ ½ ¥ ½ ¥ ²º£ ●P₹ □P₹ ▫¹¹⅓⅜£ ■ᴴ┬ᴴ┬¹└ꜰ€ᴺ└⅝ ▫⅓℅ —℅₀⅓└ꜰ└ꜰ€⅛ †¹ᴺ└⅝℅₀₀ –⅝⅛ⱽ┬–⅜⅝ᶜᵣ⅛⅔⅓⅜ ¥ ²ªªª¼£
ff⅝℅₀₀⅓–℗⅓–⅓£ ‡–⅜€⅓
●¹²⅓€℅₀₀⅝⅜ »¡¤º¿¥¤²ª½ª¢®¹⁄₄²¹½ƒ »¡¤º¿¥¤½¢ⁿ²℗®½²¹½
ff⅝℅₀₀⅝ᴴ┬℗¹–⅝⅜ »¡¤º¿¥¡¢ª¿¥ⁿª⁰½²¹½²¹¼
○⅓₦⅜ »¡¤º¿¥¡¢ª¿¥½℗®ºⁿ¤²¹½
fi⅝²⅓└ꜰ€ᴺ└⅝⅜ ℗ᴺ└ᴺᴴ┬⅜ƒƒ₩₩₩P₹⅓ⱽ┬ᴺ└¹Nº¹ᴺ└€❂⅝¥℗¹⅓–⅜ᴺ└¹¹℅₀└ꜰP₹⅛¹Nº

Vaishali Industrial Polymers
–ⱽ┬–€℅₀ □¹₨⅓‰₀ ¡■ᶜᵣ¹ᴴ┬ᶜᵣ€⅝ᴺ└¹ᶜᵣ¿
“⅜⅜ᶜᵣ⅝└ꜰ└ꜰ¾ ○¹P₹ ⁿºª £ □⅓–⅝└ꜰ® –ᴺ└ᶜᵣ⅝⅝ᴺ└£ “ᴺ└®€ᴴ┬⅝ᴺ└£ —℗⅝––⅓€ ¥ ⁿªªª²℗£ ff⅓Nº€℅₀ ○⅓⅜ⱽ┬£ ‡–⅜€⅓
●¹²⅓€℅₀₀⅝⅜ »¡¤º¿¥¤℗¢ªªª²¹⁄₄¼ⁿª⁄ƒ »¡¤º¿¥©ª²ⁿª©¤ª²ⁿ
ff⅝℅₀₀⅝ᴴ┬℗¹–⅝⅜ »¡¤º¿¥¡¢¢¿¥½ⁿº²º²ª¢¤
fi⅝²⅓└ꜰ€ᴺ└⅝⅜ ℗ᴺ└ᴺᴴ┬⅜ƒƒ₩₩₩P₹ᴴ┬℅₀¹⅛└ꜰᴺ└€⅛⅛¹–ᴺ└⅓€–⅝ᶜᵣ└ꜰP₹€–

Unique Polymer Aids
●⅓–€└ꜰ® ˢᴹⱽ┬Nº⅓ᶜᵣ ƒ ●ᶜᵣP₹ ▫⅓℗ⱽ┬℅₀ ‹⅝❂
“⅜⅜ᶜᵣ⅝└ꜰ└ꜰ¾ ¼¢ª“ƒ½℗£ □⅓℅₀€ ○¹P₹ º“£ ○ᶜᵣ€⅝–⅜└ꜰ —¹⁰₀₀¹–₨ ‡–⅜ⱽ┬└ꜰᴺ└ᶜᵣ€⅓‰₀
“ᶜᵣ⅝⅛⅓£ ○⅝⅛⅓ᶜᵣ ●⅓–└ꜰ⅓ᶜᵣ¹❂⅛⅓ᶜᵣ ▪⅓ᶜᵣ℅u ●⅝⅝ᴺ└ᶜᵣ¹ –ᴺ└⅓ᴺ└€¹–£ –℗⅓℗³⁄₈⅓⅓ᶜᵣ⅛⅓£ ‹⅝‰₀℗€ ¥ ºº²ª¤²£ ‡–⅜€⅓
●¹²⅓€℅₀₀⅝⅜ »¡¤º¿¥¤©ºº℗¤º¹½¹⁄₂ºƒ»¡¤º¿¥¤©ºª²ºⁿª²ª½℗
ff⅝℅₀₀⅝ᴴ┬℗¹–⅝⅜ »¡¤º¿¥:ºº¿¥ⁿ²©ª²®²¤
fi⅝²⅓└ꜰ€ᴺ└⅝⅜ ℗ᴺ└ᴴ┬⅜ƒƒ₩₩₩P₹ⱽ┬–€ᶠꜰⱽ┬⅝ᴴ┬¹⁰℅₀₨Nº⅝ᶜᵣ⅛⅓€⅜└ꜰP₹⅛¹Nº

Trimurti Plast Containers Private Limited
▫⅓℅ ●€ᶜᵣ℅⅝ ¡‹€ᶜᵣ⅝⅛ᴺ└¹ᶜᵣ¿
“⅜⅜ᶜᵣ⅝└ꜰ└ꜰ¾ ˢᴹᶜᵣ€└ꜰ®–⅓ –ⱽ┬€℅₀⅜€–℗ ○¹P₹ ¼ºª £ ▪‰₀¹ᴺ└ ○¹P₹ ©¼¼£ □⅓–⅝└ꜰ® ○⅓℗⅓ᶜᵣ£ ‹℗⅓–℅ᵤ₩⅓⅜€ ffl€℅₀₀⅓℗⅝
▪ⱽ┬–⅝ ¥ ¢ºº²¢¼£ ●⅓℗⅓ᶜᵣ⅛⅓└ꜰ℗ᴺ└ᶜᵣ⅛⅓£ ‡–⅜€⅓
●¹²⅓€℅₀₀⅝⅜ »¡¤º¿¥¤©¹½²¹½¹¼½¹⁄ƒ »¡¤º¿¥¤©©ºª¤ª¤®¢¤
ff⅝℅₀₀⅝ᴴ┬℗¹–⅝⅜ »¡¤º¿¥¡½ª¿¥½¢¼℗½ºº©¹⁄₄ƒ»¡¤º¿¥¡½ª¿¥½¢¼℗¹⁄₄ºª²
○⅓₦⅜ »¡¤º¿¥¡½ª¿¥½¢¼℗¹⁄₄¼®¤
fi⅝²⅓└ꜰ€ᴺ└⅝⅜ ℗ᴺ└ᴺᴴ┬⅜ƒƒ₩₩₩P₹ᴺ└ᶜᵣ€Nº ⱽ┬ᶜᵣᴺ└€ᴴ┬℅₀⅓└ꜰᴺ└P₹⅛¹Nº

Techno Packaging Industries
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

Mangla Metal Private Limited
[illegible]
[illegible]
[illegible]
[illegible]

LAB CHEMICALS

A. B. Enterprises
●ᶜᴿPₜ ●⅓—⁽ᴿ⁾⅓ᶜᴿ%₀₀⅓%₀ –⅓—℗ ¡■⅓ᶜᴿᴺ└—⅝ᶜᴿ¿
“⅜⅜ᶜᴿ⅝└ᶠ└ᶠ¾ ○¹Pₜ ½ª½£ –®ᶜᴿ⅓⅜⅓—⅓—⅜ –ⱽᵀ€%₀₀³⁄₈€—℗£ ○¹Pₜ ½®½ƒ ½®¢£ –⅓Nºⱽᵀ⅝%₀ –ᴺ└ᶜᴿ⅝⅝ᴺ└£ ●ⱽᵀNº²⁄₃⅓€ ¥ ¢ªªªª¼£ ●⅓®⅓ᶜᴿ⅓└ᶠ®ᴺ└ᶜᴿ⅓£ ‡—⅜€⅓
●¹²⁄₃€%₀₀⅝¾ »¡¤º¿¥¤©¤½¢½¢ⁿª²£ »¡¤º¿¥¤©ⁿ¤¢¼¢®¤¢
ff⅝%₀₀⅝ᴴᵀ®¹—⅝¾ »¡¤º¿¥¡½½¿¥½¼¢¼²ª¤®£ »¡¤º¿¥¡½½¿¥ⁿⁿ¼º½²©ⁿ
fi⅝²⁄₃└ᶠ€ᴺ└⅝¾ ®ᴺ└ᴺᴴᵀ¾ƒƒ₩₩₩Pₜ⅓²⁄₃⅝—ᴺ└⅝ᶜᴿᴴᵀᶜᴿ€└ᶠ⅝└ᶠ€—⅜€⅓Pₜ⅛¹Nº

Shri Krishna Enterprises
●ᶜᴿPₜ –⅓%₀₀⅝└ᶠ ●⅓—⅓℠⅝ᶜᴿ
‹⅝%₀₀®€ ¥ ‡—⅜€⅓
●¹²⁄₃€%₀₀⅝¾ »¡¤º¿¥¤©ºº¢ºⁿⁿⁿ½£ »¡¤º¿¥¤©ºº¢ºⁿ®ⁿ½
ff⅝%₀₀⅝ᴴᵀ®¹—⅝¾ »¡¤º¿¥¡ºº¿¥¢¼ª³¼¤½©
fi⅝²⁄₃└ᶠ€ᴺ└⅝¾ ®ᴺ└ᴺᴴᵀ¾ƒƒ₩₩₩Pₜ└ᶠᶜ%⅝⅛®⅝Nº€⅛⅓%₀└ᶠPₜ⅛¹Pₜ€—

Forbes Pharmaceuticals
—¹—ᴺ└⅓⅛ᴺ└ ■⅝ᶜᴿ└ᶠ¹—¾ ●ᶜᴿPₜ “—ⱽᵀᶜᴿ❁⅓ ℠⅓Nº⅜⅓ᶜᴿƒ●ᶜᴿPₜ ●ⱽᵀ⅜€ᴺ└ ℠⅓Nº³⁄₈⅓ᶜᴿ
“⅜⅜ᶜᴿ⅝└ᶠ└ᶠ¾ —¹ᶜᴿᴴᵀ¹ᶜᴿ⅓ᴺ└⅝ ■⅞⅞€⅛⅝¾ ²ª®£ –ⱽᵀ€└ᶠ—⅝└ᶠ└ᶠ ■⅓ᶜᴿ%£ ‹⅝ᶜᴿ⅓└ᶠ⅓ᶜᴿ □¹¹⅓⅜ —¹ᶜᴿ—⅝ᶜᴿ£ †€—℠₩⅓%₀⅓ ℞⅓—⅝£ ff€%₀₀⅓% □¹¹⅓⅜£ □®⅓ᴺ└%¹ᴴᵀ⅓ᶜᴿ¡›¿£ ●ⱽᵀNº²⁄₃⅓€ ¥ ¢ªª ª®® ¡‡—⅜€⅓¿
ff⅝%₀₀¾ »¡¤º¿¥¡½½¿¥½ºª½ ¢ª¢ºº£ ¢½¢¼ ¢½¢¼
●¹²⁄₃€%₀₀⅝¾ »¡¤º¿¥¤©º¤©©²¤¼ª
○⅓₦¾ »¡¤º¿¥¡½½¿¥½ºª½ ©®®®£ ¢½¢¼ ¢½ªª
›Nº⅓€%₀₀¾ €—⅞¹”⅞¹ᶜᴿ²⁄₃⅝└ᶠᴴᵀ®⅓ᶜᴿNº⅓Pₜ€—£
›Nº⅓€%₀₀¾ ⅞¹ᶜᴿ²⁄₃⅝└ᶠᴴᵀ®⅓ᶜᴿNº⅓”®¹ᴺ└Nº⅓€%₀Pₜ⅛¹Nº
fi⅝²⁄₃└ᶠ€ᴺ└⅝¾ ®ᴺ└ᴺᴴᵀ¾ƒƒ₩₩₩PₜNº⅝ᴺ└⅓%₀€⅛⅛®⅝NºPₜ⅛¹Nº

B. K. Chemicals
●ᶜᴿPₜ “ ●⅝®ᴺ└⅓ ¡‹€ᶜᴿ⅝⅛ᴺ└¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝└ᶠ└ᶠ¾ – ¥ ½£ –®ᶜᴿⱽᵀ└ᶠ®ᴺ└€ “ᴴᵀ⅓ᶜᴿᴺ└Nº⅝—ᴺ└£ º└ᶠᴺ└ ○%₀₀¹¹ᶜᴿ£ ○⅝⅓ᶜᴿ —⅝—ᴺ└ⱽᵀᶜᴿRs ›—ᶜ%⅓ —¹%₀₀¹—Rs ○¹Pₜ ½£ ■ⱽᵀ—⅝ ¥ ○⅓└ᶠ€ᶜ% †€℠₩⅓Rs£ –®¹└ᶠ⅓ᶜᴿ€£ ■ⱽᵀ—⅝ ¥ ¢ºº¹¼¤£
●⅓®⅓ᶜᴿ⅓└ᶠ®ᴺ└ᶜᴿ⅓£ ‡—⅜€⅓
●¹²⁄₃€%₀₀⅝¾ »¡¤º¿¥¤¼®ºª½ªª¢ª£ »¡¤º¿¥¤©©º¢º©¼¢²
ff⅝%₀₀⅝ᴴᵀ®¹—⅝¾ »¡¤º¿¥¡½ª¿¥½®½¼ªª¼ª
fi⅝²⁄₃└ᶠ€ᴺ└⅝¾ ®ᴺ└ᴺᴴᵀ¾ƒƒ₩₩₩Pₜ²⁄₃%⅛®⅝Nº€⅛⅓%₀└ᶠPₜ€—

Ekta International, Mumbai (Export Division of Navin Chemicals)
●ᶜᴿPₜ □⅓%—€%⅓—ᴺ└ ■⅓ᴺ└⅝%₀
“⅜⅜ᶜᴿ⅝└ᶠ└ᶠ¾ ¼ºª£ –®Rs⅓Nº ℠⅓Nº⅓%₀ ○—○ –%₀³⁄₈℠£ ffl€%₀₀⅝ ■⅓ᶜᴿ%₀₀⅝ ¡›⅓└ᶠᴺ└¿£
●ⱽᵀNº²⁄₃⅓€ ¥ ¢ª ª²®£ ●⅓®⅓ᶜᴿ⅓└ᶠ®ᴺ└ᶜᴿ⅓£ ‡—⅜€⅓
●¹²⁄₃€%₀₀⅝¾ »¡¤º¿¥¤¼½½²ª®ª©©
■®¹—⅝¾ »¡¤º¿¥¡½½¿¥ⁿⁿ¤¢¤¤¤¤ª ƒ ⁿⁿ¤¢¤¤¤¤º ƒ ⁿⁿ¤¢¤¤¤¤½
○⅓₦¾ »¡¤º¿¥¡½½¿¥½ⁿººⁿⁿ²¼
fi⅝²⁄₃└ᶠ€ᴺ└⅝¾ ®ᴺ└ᴺᴴᵀ¾ƒƒ₩₩₩Pₜ⅝%ᴺ└⅓¥€—ᴺ└⅝ᶜᴿ—⅓ᴺ└€¹—⅓%₀Pₜ⅛¹Nº

CLEANING CHEMICALS

Rx Marine International
▫Pₜ ff€₩⅓ᶜᵣ€ ¡▪ᶜᵣ¹ᴴₜᶜᵣ€⅝ᴺₗ¹ᶜᵣ¿
ˢᴹ€ᶜᵣ⅓–ᴺₗ€₩⅓ᶜᵣ€
“⅜⅜ᶜᵣ⅝ₗ꜀ₗ꜀¾ –¥º¤£ ffIRs⅓ᴴₜ⅓ᶜᵣ–℗⅓❂⅓–£ ¢¤£ ▪‹ ●⅝‰‰¹ ▫¹¹⅓⅜ ●⅓ₗ꜀℅€⅜ –ⱽₜ–⅜⅝ᶜᵣ
›⅓ₗ꜀ᴺₗ£ ●ⱽₜN²²⅔⅓€ ¥ ¢ªªªª¼£ ●⅓℗⅓ᶜᵣ⅓ₗ꜀℗ᴺₗᶜᵣ⅓£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¤º¥¤ⁿ²¹½½©©¤©©
ff⅝‰⅝ᴴₜ℗¹–⅝¾ »¤º¥½½¥ⁿ²ºº¤¤¤¤£ »¤º¥½½¥ⁿ²ºº¼¼¼¼
○⅓₦¾ »¤º¥½½¥½℗©ºªª¢¼
fi⅝²⅔ₗ꜀€ᴺₗ⅝¾ ℗ᴺₗᴺₗᴴₜ¾ƒƒ₩₩₩Pₜᶜᵣ₦₦Nº⅓ᶜᵣ€–⅝€–⅜€⅓Pₜ⅛¹Pₜ€–

Giant Sales Corporation
‡Pₜ ‹Pₜ □⅓ᶜᵣ℠¡—›■¿
“⅜⅜ᶜᵣ⅝ₗ꜀ₗ꜀¾ ▪‰¹ᴺₗ ○¹Pₜ ½®ª£ –⅝⅛ᴺₗ¹ᶜᵣ ¼º£ ffiᶜᵣ²⅔⅓– ›ₗ꜀ᴺₗ⅓ᴺₗ⅝£ □ⱽₜᶜᵣ℠⅓¹– ¥
º½½ªª½£ †⅓ᶜᵣRs⅓–⅓£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¤º¥¤℗ºº¤¤ⁿ©ª¼£ »¤º¥¤©ºª¢¤²ⁿ¢©
ff⅝‰⅝ᴴₜ℗¹–⅝¾ »¤º¥º½¢¥½¼©ºº½¼£ »¤º¥º½¢¥¢ª¼¢®²²
fi⅝²⅔ₗ꜀€ᴺₗ⅝¾ ℗ᴺₗᴺₗᴴₜ¾ƒƒ₩₩₩Pₜ℠€⅓–ᴺₗₗ꜀⅓‰⅝ₗ꜀Pₜ⅛¹Pₜ€–

Chemtex Speciality Limited
—¹–ᴺₗ⅓⅛ᴺₗ ▪⅝ᶜᵣₗ꜀¹–¾ ○Pₜ ‹Pₜ –℗⅓ᴺₗᴺₗ⅝ᶜᵣ ¡‹€ᶜᵣ⅝⅛ᴺₗ¹ᶜᵣ¿
“⅜⅜ᶜᵣ⅝ₗ꜀ₗ꜀¾ ººº£ †⅓ⱽₜᴺₗ⅝ –ₗ꜀ᶜᵣ⅝⅝ᴺₗ£ —¹ᶜᵣᴴₜ¹ᶜᵣ⅓ᴺₗ⅝ ▪⅓ᶜᵣ℅£ ℗ⁿ¥“£ ff¹ᴴₜₗ꜀€⅓ ▫¹¹⅓⅜
–¹ⱽₜᴺₗ℗£ ˢᴹ1‰℅⅓ᴺₗ1⅓ ¥ ℗ªªª¢ⁿ£ fi⅝ₗ꜀ᴺₗ –⅝–℠⅓‰£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿ ¥ ©¤ⁿººººººº
▪℗¹–⅝¾ »¡¤º¿ ¥ ¡¼¼¿ ¥ ℗ººººººº£ »¡¤º¿ ¥ ¡¼¼¿ – ℗ºººººº½
fi⅝²⅔ₗ꜀€ᴺₗ⅝¾ ℗ᴺₗᴺₗᴴₜ¾ƒƒ₩₩₩Pₜ⅛℗⅝Nºᴺₗ⅝₦‰€N€ᴺₗ⅝⅜Pₜ⅛¹Nº

Acuro Organics Limited
▫¹℗€ᴺₗ ˢᴹ⅓ᶜᵣ–⅓–€ ¡‹€ᶜᵣ⅝⅛ᴺₗ¹ᶜᵣ¿
“⅜⅜ᶜᵣ⅝ₗ꜀ₗ꜀¾ ○¹Pₜ½℗£ “ₗ꜀℗¹℃ᵤ⅓ —℗⅓Nº²⁄₃⅝ᶜᵣₗ꜀£ ²¥–£ ▫⅓℅⅝–⅜ᶜᵣ⅓ ▪⅓ᶜᵣ℅ᵤ ▪ⱽₜₗ꜀ᴺₗᶜᵣ⅓ ▫¹¹⅓⅜£
○⅝₩ ‹⅝‰℗€ ¥ ªªªªⁿªª£ ‹⅝‰℗€£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¤º¥©©©½¢¢¢¤¤¤£ »¤º¥©©©½²²²ªªª
ff⅝‰⅝ᴴₜ℗¹–⅝¾ »¤º¥º½ª¥¢©©©¢ºº£ »¤º¥º½ª¥¢©©©¢¼²
fi⅝²⅔ₗ꜀€ᴺₗ⅝¾ ℗ᴺₗᴺₗᴴₜ¾ƒƒ₩₩₩Pₜ⅛℗⅝Nº€⅛⅓‰ₗ꜀¤¤Pₜ⅛¹Nº

Sumangalam Dairy Farm Solutions (India) Private Limited
▫⅓℗ⱽₜ‰ ᵀᴹ⅓€– ¡‹€ᶜᵣ⅝⅛ᴺₗ¹ᶜᵣ¿
“⅜⅜ᶜᵣ⅝ₗ꜀ₗ꜀¾ ▪‰¹ᴺₗ ○¹Pₜ ¢ƒ¢½£ –€ᴺₗ⅝ ¢£ –⅓℗€⅔⅓⅔⅓⅜ ‡–⅜ⱽₜₗ꜀ᴺₗᶜᵣ€⅓‰ “ᶜᵣ⅝⅛
‡–⅞ᶜᵣ¹–ᴺₗ ■⅞ “–⅓–⅜ ffI€℗⅓ᶜᵣ ff⅝ᶜᵣRNº€–⅓‰£ □℗⅓ᴹᴰ€⅓⅔⅓⅓⅜ ¥ ½ªºªªª£ ffiᴺₗᴺₗ⅓ᶜᵣ
▪ᶜᵣ⅓⅜⅝ₗ꜀℗£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¤º¥¤¤ªªª²ª℗¼ºº£ »¤º¥¤²¤¤©©©©ⁿ²
ff⅝‰⅝ᴴₜ℗¹–⅝¾ »¤º¥º½ª¥¢º²º²ⁿ²
○⅓₦¾ »¤º¥º½ª¥¢º²º²ⁿ²
fi⅝²⅔ₗ꜀€ᴺₗ⅝¾ ℗ᴺₗᴺₗᴴₜ¾ƒƒ₩₩₩Pₜ⅜⅞ₗ꜀¥€–⅜€⅓Pₜ€–

Suppliers of Plant & Machinery

EVAPORATOR

Alpha Water Technologies India P Ltd.,

[illegible]

VEDH TECHNO ENGINEERS PVT. LTD.

[illegible]

Christopher & Sons

[illegible]

Industrial Devices (India) Pvt. Ltd.

[illegible]

RSVP Tech

[illegible]

CHLORINATOR

Sun Engineering Services

“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ ºº¼£ ○€‰℅⅓–ᴺᴸ® –℗¹ᴴᵀᴴᵀ€–℠ —⅝–ᴺᴸ⅝ᶜᴿ£ ■ᴴᵀᴴᵀ ■⅞ ffl⅓ᶜᴿ€Rs⅓ ffl€⅜Rs⅓‰⅓Rs⅓£ ○⅓–⅓ —℗€‰¹³⁄₈⅓ —℗⅓ᶜᴿ ▫⅓ᴸᶠᴺᴸ⅓£ “℗Nº⅝⅜⅓²⁄₃⅓⅜ ¥ ¼©½¼¼ªº£ □ᵛᵀ℅⅓ᶜᴿ⅓ᴺᴸ£ ‡–⅜€⅓ Pt

●¹²⁄₃€‰⅝¾ »¡¤º¿¥¤¢½®ª¢©²²½ £ »¡¤º¿¥¤ⁿ¼©²¼¢½ª©

›Nº⅓€‰¾ €–⅞¹”ᴸᶠᵛᵀ–⅝–℠€–⅝⅝ᶜᴿ€–℠ᴸᶠ⅝ᶜᴿ❂€⅛⅝ᴸᶠPt€–£

›Nº⅓€‰¾ ᴸᶠᵛᵀ–⅝–℠€–⅝⅝ᶜᴿ€–℠℗½”℠Nº⅓€‰Pt⅛¹Nº

fi⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴸᴴᵀ¾ƒƒᴸᶠᵛᵀ–⅝–℠€–⅝⅝ᶜᴿ€–℠ᴸᶠ⅝ᶜᴿ❂€⅛⅝ᴸᶠPt€–

Chloro Tech Equipments Pvt. Ltd.

■⅞⅞Pƒ○⅓⅛ᴺᴸPt “³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ ▪‰¹ᴺᴸ ○¹Pt ¼ª²ƒ¼ª©¥¼ª¤£ ‡⅛℗℗⅓ᴴᵀ¹ᶜᴿ⅝¥–℠⅓ᴺᴸᴴᵀ¹ᶜᴿ⅝ □Pt‡Pt‹Pt—Pt ›ᴸᶠᴺᴸ⅓ᴺᴸ⅝£

○⅝⅓ᶜᴿ ■○□— —¹Pt£ –℠⅓ᴺᴸᴴᵀ¹ᶜᴿ⅝ ▫¹¹⅓⅜£ –ᵛᵀᶜᴿ⅓ᴺᴸ¥¼¤¢ ²ºª □ᵛᵀ℅⅓ᶜᴿ⅓ᴺᴸ ¡‡○‹‡“¿

ff⅝‰Pt ○¹Pt¾ ¡■ƒ○¿ ª½ⁿº¥½©¢ºⁿª¼£ ª½ⁿº¥ⁿ²¼ºⁿªº

●¹²⁄₃€‰⅝ ○¹Pt¾ »¤º ¤©½²º º½¤¤® ¡ᴸᶠ⅓‰⅝ᴸᶠ ¶ ●⅓ᶜᴿ℅⅝ᴺᴸ€–℠ †⅝⅓⅜¿

○⅓₹ ○¹Pt¾ ª½ⁿº¥½©¢ºⁿª½

›¥Nº⅓€‰ ¾ ⅛℗‰¹ᶜᴿ¹ᴺᴸ⅝⅛®,⅛‰½”Rs⅓℗¹¹Pt⅛¹Pt€–

›¥Nº⅓€‰ ¾ ⅛ᴺᴸ⅝ᴴᵀ‰Pt⅛‰½”℠Nº⅓€‰Pt⅛¹Nº

fi⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ₩₩₩Pt⅛℗‰¹ᶜᴿ¹ᴺᴸ⅝⅛℗Pt€–

Pristine Water

“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ – ½¼¢£ ■℅℗‰⅓ ‡–⅜ᵛᵀᴸᶠᴺᴸᶜᴿ€⅓‰ “ᶜᴿ⅝⅓£ ▪℗⅓ᴸᶠ⅝ ‡£ ○⅝₩ ‹⅝‰℗€ ºº ª½ª

▪℗¹–⅝¾ » ¤º ºº ¢ª²²ª®¼º

▪℗¹–⅝¾ » ¤º ®½¤ªª ⁿ½©¢¢

ff⅝‰⅝⅞⅓₹¾ » ¤º ºº ½ⁿ©ºº®ºª

›Nº⅓€‰¾ ᴸᶠ⅓‰⅝ᴸᶠ”ᴴᵀᶜᴿ€ᴸᶠᴺᴸ€–⅝₩⅓ᴺᴸ⅝ᶜᴿPt€–

›Nº⅓€‰¾ ᴸᶠᵛᵀᴴᵀᴴᵀ¹ᶜᴿᴺᴸ”ᴴᵀᶜᴿ€ᴸᶠᴺᴸ€–⅝₩⅓ᴺᴸ⅝ᶜᴿPt€–

fi⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ₩₩₩Ptᴴᵀᶜᴿ€ᴸᶠᴺᴸ€–⅝₩⅓ᴺᴸ⅝ᶜᴿPt€–

BOMBAY INSTRUMENT (BIMCO)

“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ –℗¹ᴴᵀ ○¹Pt²£ ²ªƒ©ⁿ£ ™€ᴺᴸ⅝℅⅓ᶜᴿ fi⅓⅜€£ ■ᴴᵀᴴᵀPt ffl€–⅓Rs †¹ᴺᴸ⅝‰£ ©©£

ff℗⅓℅ᵛᵀᶜᴿ⅜₩⅓ᶜᴿ ▫¹¹⅓⅜£

●ᵛᵀNº²⁄₃⅓€ ¥ ¢ªªªª½

Rx⅓–⅜ Rx€–⅝ ○¹ ¾ ª½½¥½¼©¤ºª®¼ƒ®²

▪℗¹–⅝ ¾ »¤º ¥ ®¼ª¢¼¤¢®ⁿ© ƒ ©¤½©©©¢ºº

›¥Nº⅓€‰ ¾ ⅔€Nº⅛¹”Nºᴺᴸ–‰Pt–⅝ᴺᴸPt€–

fi⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴸᴴᵀᴸᶠ¾ƒƒ⅔¹Nº²⁄₃⅓Rs€–ᴸᶠᴺᴸᶜᴿᵛᵀNº⅝–ᴺᴸPt€–

RSVP CHLORO TECH

■⅞⅞€⅛⅝ ¶ fi¹ᶜᴿ℅ᴸᶠ¾ ff¥º¼¤£ –‡▪—■ff fi■●›○–£ ‡○‹ffi–ff▫‡“Rx ›–ff“ff›£ —†›○○“‡

¥ⁿªª ªⁿ½

▪℗¾ ¤©¢ª¼¼©ⁿⁿªƒ®²²ª½¢¤¤¤©

›Nº⅓€‰¾ ᴸᶠ❂ᴴᵀ⅛℗‰¹ᶜᴿ€–⅓ᴺᴸ€¹–”℠Nº⅓€‰Pt⅛¹Nº

›Nº⅓€‰¾ ⅛⅜℗€–⅝ᴸᶠ℗℅ᵛᵀNº⅓ᶜᴿ®®”℠Nº⅓€‰Pt⅛¹Nº

›●⅓€‰ ¾ ᴸᶠ⅓‰⅝ᴸᶠºᶜᴿᴸᶠ❂ᴴᵀ⅛℗‰¹ᶜᴿ¹ᴺᴸ⅝⅛℗”℠Nº⅓€‰Pt⅛¹Nº

fi⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ₩₩₩Ptᶜᴿᴸᶠ❂ᴴᵀᴺᴸ⅝⅛℗Pt€–

CAUSTIC SOLUTION PREPARATION TANK

Rahul Engineering Company

▫⅓℗ⱽ‰ —℗℗⅓℅⅝⅜ ¡▪ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺᴸ¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ ▪‰¹ᴺᴸ ○¹Pt ⁿ£ □⅓ᴺᴸ ○¹Pt ⁿ½®ƒ½ƒ½ƒⁿ£ ▪ⱽᵀ—⅝¥○⅓ᴸᶠ€℅ †€℗₩⅓Rs
¹ᴴᵀᴴᵀ¹ᴸᶠ€ᴺᴸ⅝ ˢᴹ€ᴸᶠ℗¹ᶜᴿ ▪ⱽᵀNºᴴᵀᴸᶠ£ ˢᴹⱽᵀᶜᴿⱽᵀ‰€£ —℗⅓℅⅓—£ ▪ⱽᵀ—⅝ ¥ ¢ºª²ª°£
●⅓℗⅓ᶜᴿ⅓ᴸᶠ℗ᴺᴸᶜᴿ⅓£ ‡—⅜€⅓
●¹²⅔€‰⅝¾ »¤º¥¤©¤ªªº©©©º£ »¤º¥¤©½½¼¢²²©©
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pt ᴴᵀᶜᴿ¹¹⅛⅝ᴸᶠᴸᶠ⅝ᶠⱽᵀ€ᴴᵀᴺº⅝—ᴺᴸᶠPt—⅝ᴺᴸ

Satyam Industries

“℅€ᴺᴸ —⅝‰℗⅝℅⅓ᶜᴿ ¡—›■¿
“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ ▪‰¹ᴺᴸ ○¹Pt ½©ⁿ³ —⅝⅛ᴺᴸ¹ᶜᴿ ○¹Pt ℗ ▪—○ff‹“£ —℗¹ᴸᶠ⅓ᶜᴿ€£ ▪ⱽᵀ—⅝ ¥ ¢ºº¹½ⁿ£
●⅓℗⅓ᶜᴿ⅓ᴸᶠ℗ᴺᴸᶜᴿ⅓£ ‡—⅜€⅓
●¹²⅔€‰⅝¾ »¤º¥¤©ⁿ¼©½©½©½£ »¤º¥¤©ⁿªº¢¢ºº²
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Ptᴸᶠ⅓ᴺᴸRs⅓Nº€—⅜ⱽᵀᴸᶠᴺᴸᶜᴿ€⅝ᴸᶠ€—⅜€⅓⅛¹Pt⅛¹Nº

Filtereno Engineering Co.

●⅓—℗‰⅓ ●⅓ⱽᵀᶜᴿRs⅓ ¡—›■¿
“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ ffi—€ᴺᴸ ○¹Pt ¢ƒ—£ ˢᴹ⅓—℅€ ●⅓—℅€ ›ᴸᶠᴺᴸ⅓ᴺᴸ⅝£ ○⅝⅓ᶜᴿ †¹Nº⅝ □ⱽᵀ⅓ᶜᴿ⅜
ffᶜᴿ⅓€—€—℗ —⅝—ᴺᴸ⅝ᶜᴿ ○⅓ᶜᴿ⅓Rs⅓— ○⅓℗⅓ᶜᴿ£ □℗⅓ᴺᴸ℅¹ᴴᵀ⅓ᶜᴿ fi⅝ᴸᶠᴺᴸ£ ●ⱽᵀNº⅔⅓€ ¥
¢ªªª©ⁿ£ ●⅓℗⅓ᶜᴿ⅓ᴸᶠ℗ᴺᴸᶜᴿ⅓£ ‡—⅜€⅓
●¹²⅔€‰⅝¾ »¤º¥¤©º¤½¢º²ªⁿ£ »¤º¥©¢²¹½¤º℗½²ⁿ
ff⅝‰⅝ᴴᵀ℗¹—⅝¾ »¤º¥¹½½¥ⁿ²ⁿ²ºº©©²¢£ »¤º¥¹½½¥ⁿ²ⁿ²ºº©©ªª
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pt⅞€‰ᴺᴸ⅝ᶜᴿ⅝—¹Pt⅛¹Nº

BHAGWATI FIBROTECH

“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ —ⱽᵀᶜᴿ⅓ᴺᴸ —ᶜᴿ⅓—⅛℗ —⅝⅛ᶜᴿ ™⅓—ᴺᴸ⅓ ‹℗⅓ᶜᴿ⅓Nº ˢᴹ⅓—ᴺᴸ⅓£ ˢᴹ⅓⅜⅛⅜ᶜᴿ⅓
—℗⅓ᶜᴿ ▫⅓ᴸᶠᴺᴸ⅓£ —ⱽᵀᶜᴿ⅓ᴺᴸ¥ˢᴹ⅓⅜⅛⅜⅓ᶜᴿ⅓ ▫¹¹⅓⅜£ fffl⅓ᶜᴿ⅝‰€£ ‹€ᴸᶠᴺᴸPt —ⱽᵀᶜᴿ⅓ᴺᴸ ¥ ¼¤¢
¼½℗£ □ⱽᵀ℅⅓ᶜᴿ⅓ᴺᴸPt ‡—⅜€⅓Pt
●¹²⅔€‰⅝¾ »¤º ¤¼½℗² ²²²²²
—¹—ᴺᴸ⅓⅛ᴺᴸ ▪⅝ᶜᴿᴸᶠ¹—¾ ●ᶜᴿPt ˢᴹ⅓‰ᴴᵀ⅝ᴸᶠ℗ “—⅓⅜℅⅓ᴺᴸ
●¹²⅔€‰⅝¾ »¤º ¤¼½℗² ²²²²²
›Nº⅓€‰¾ €—⅞¹”⅔℗⅓₩⅓ᴺᴸ€⅞€⅔ᶜᴿ¹ᴺᴸ⅝⅛℗Pt⅛¹Nº
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pt⅔℗⅓₩⅓ᴺᴸ€⅞€⅔ᶜᴿ¹ᴺᴸ⅝⅛℗Pt⅛¹Nº

Kareliya Steel Industries

“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ —‰¹¹⅛℅ ○¹Pt ¼ºƒ½½£ —ƒ† ●⅓₦Nº⅝⅛℗ ›ᶠⱽᵀ€ᴴᵀᴺº⅝—ᴺᴸᴸᶠ ▪⊛ᴺᴸPt Rxᴺᴸ⅜£
fffl⅓ᶜᴿᴸᶠ¹⁰‰⅓£ ff⅓‰ⱽᵀ℅⅓¥ ●⅓℗⅝Nº³⁄₈⅓²⁄₃⅓³⁄₈£ ‹€ᴸᶠᴺᴸPt¥ˢᴹ℗⅝⅜⅓£ □ⱽᵀ℅⅓ᶜᴿ⅓ᴺᴸ ¥ ¼©℗
º¼ª
“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ ▪‰¹ᴺᴸ ○¹Pt ºª²ª²ƒ“£ ▪℗⅓ᴸᶠ⅝ ‡‡‡£ ■ᴴᵀᴴᵀPt ˢᴹ⅓‰ⱽᵀᴴᵀⱽᵀᶜᴿ —¹NºNº⅝ᶜᴿ⅛€⅓‰
—⅓—℅£ □‡‹—£ fffl⅓ᴺᴸ⊛⅓£ “℗Nº⅝⅜⅓²⁄₃⅓³⁄₈ □ⱽᵀ℅⅓ᶜᴿ⅓ᴺᴸ ¥ ¼©½ ¢¢²
●ᶜᴿPt †€ᶜᴿ⅝— ˢᴹ⅓ᶜᴿ⅝‰€Rs⅓ ¡●¿ »¤º ¤¤º¼© ©½¤ª©
●ᶜᴿPt —⅓℗⅓ᶜᴿ ˢᴹ⅓ᶜᴿ⅝‰€Rs⅓ ¡●¿ »¤º ¤℗ºº½¢ ºº®ª℗
●ᶜᴿPt “—℅€ᴺᴸ ℅⅓ᶜᴿ⅝‰€Rs⅓ ¡●¿ »¤º ©ºª¢ª©²®½ºº
›Nº⅓€‰¾ ℅⅓ᶜᴿ⅝‰€Rs⅓ᴸᶠᴺᴸ⅝⅝‰”℗Nº⅓€‰Pt⅛¹Nº
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pt℅⅓ᶜᴿ⅝‰€Rs⅓ᴸᶠᴺᴸ⅝⅝‰Pt⅛¹Nº

Design Tanks

[illegible]

[illegible]

[illegible]

[illegible]

Sera GmbH

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Enduramaxx Limited

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

STORAGE TANK

Samarth Engineers
●ᶜᴿPₜ –⅓–℅⅓Rs ▫⅓ⱽᵀᴺᴸ ¡●⅓–⅓℗€–℗ ‹€ᶜᴿ⅝⅛ᴺᴸ¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ ffi–€ᴺᴸ¥ºᴼ£ ▪‰₀¹ᴺᴸ ○¹Pₜ ¢º²£ ™¥–‰₀¹¹⅛℅u£ ●Pₜ‡Pₜ‹Pₜ—Pₜ£ –℗¹ᴸᶠ⅓ᶜᴿ€£ ▪ⱽᵀ–⅝ ¥ ¢ºº³½ⁿ£ ●⅓℗⅓ᶜᴿ⅓ᴸᶠ℗ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€‰₀⅝¾ »¡¤º¿¥¤®ⁿⁿ¼½ⁿ½¢² ƒ »¡¤º¿¥¤©ⁿªª¤©©ªⁿ
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡½ª¿¥ⁿⁿ¼ªª¼ª² ƒ »¡¤º¿¥¡½ª¿¥ⁿⁿ¼ªº®ⁿ¢
fi⅝²⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pₜᴸᶠ⅓Nº⅓ᶜᴿᴺᴸ®¥⅝–℗€–⅝⅝ᶜᴿᴸᶠPₜ⅛¹Nº

Hexamide Agro Tech LLP
●ᶜᴿPₜ “℅⅓Rs ™⅓⅜®⅓☸ ƒ ●ᶜᴿPₜ “℅⅓Rs ™⅓⅜®⅓☸ ▪⅓ᴺᴸ€‰₀ ¡‹€ᶜᴿ⅝⅛ᴺᴸ¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ ▪‰₀¹ᴺᴸ ○¹Pₜ ºº£ “⅜€ᴺᴸRs⅓ ‡–⅜ⱽᵀᴸᶠᴺᴸᶜᴿ€⅓‰₀ ›ᴸᶠᴺᴸ⅓ᴺᴸ⅝£ “ᴺᴸ ▪¹ᴸᶠᴺᴸ
℠ⱽᵀNº²⅔€₩⅓‰₀€£ ff⅓‰₀ⱽᵀ℅u⅓ ℠®⅓‰₀⅓ᴴᵀⱽᵀᶜᴿ£ ‹€ᴸᶠᴺᴸᶜᴿ€⅛ᴺᴸ¥ ▫⅓€℗⅓⅜£ ○⅓☸€
●ⱽᵀNº²⅓€ ¥ ¢ºª½ºª£ ●⅓®⅓ᶜᴿ⅓ᴸᶠ®ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€‰₀⅝¾ »¡¤º¿¥¤¤½ª¢ª®®ª¤ ƒ»¡¤º¿¥¤¤½ª¢ª®®½®
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡½½¿¥ⁿ¢²®²®®® ƒ »¡¤º¿¥¡½º¤½¿¥½©½²²º
›Nº¹⅓€‰₀¾ ®⅝₦⅓Nº€⅜⅝”℗Nº¹⅓€‰₀Pₜ⅛¹Nº£
›Nº¹⅓€‰₀¾ ®⅝₦⅓Nº€⅜⅝⅓℗ᶜᴿ¹”℗Nº¹⅓€‰₀Pₜ⅛¹Nº
fi⅝²⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pₜ®⅝₦⅓Nº€⅜⅝Pₜ€–

Acrow Plast
●ᶜᴿPₜ ▪ᶜᴿ⅓⅜⅝⅝ᴴᵀ ▪⅓ᴺᴸ®¹⅓ᶜᴿ⅝ ¡▪ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺᴸ¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ ©ª ƒ ®¼¤£ ▫Pₜ “Pₜ ○⅓®⅓ᶜᴿ£ □®⅓ᴺᴸ℅u¹ᴴᵀ⅓ᶜᴿ ›⅓ᴸᶠᴺᴸ£ ●ⱽᵀNº²⅓€ ¥ ¢ªªª®²£
●⅓®⅓ᶜᴿ⅓ᴸᶠ®ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€‰₀⅝¾ »¡¤º¿¥¤¼½½ⁿⁿ¢©ªª ƒ »¡¤º¿¥¤©½º℠ⁿº½¢ª
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡½½¿¥ⁿ²¹½²ⁿ²®©
›Nº¹⅓€‰₀¾ ⅓⅛ᶜᴿ¹₩,ᴴᵀ‰₀⅓ᴸᶠᴺᴸ”Rs⅓®¹¹Pₜ⅛¹Nº£
›Nº¹⅓€‰₀¾ ⅓⅛ᶜᴿ¹₩ᴴᵀ‰₀⅓ᴸᶠᴺᴸ½ªª®”ᶜᴿ⅝⅜€⅞⅞Nº¹⅓€‰₀Pₜ⅛¹Nº
fi⅝²⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pₜ⅓⅛ᶜᴿ¹₩ᴴᵀ‰₀⅓ᴸᶠᴺᴸPₜ⅛¹Nº

Z Fabrics
●ᶜᴿPₜ ffl ●¹®⅓– ƒ ●ᶜᴿPₜ ▪ ▪ᶜᴿ⅓℅u⅓ᴸᶠ® ¡▪⅓ᶜᴿᴺᴸ–⅝ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ ○¹Pₜ ¢ⁿ¢£ ▪¹ᴺᴸ¹³⅜⅝ †¹ⱽᵀᴸᶠ⅝£ ℠¹ᴺᴸ℗€ ▫¹¹⅓⅜£ ●⅓®⅓‰₀£ ○⅓℗ᴴᵀⱽᵀᶜᴿ ¥ ¢¢ªª¼½£
●⅓®⅓ᶜᴿ⅓ᴸᶠ®ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€‰₀⅝¾ »¡¤º¿¥¤¤®ª¤¼©ªª² ƒ »¡¤º¿¥¤®ⁿ¢¤º²ª¤ª
›Nº¹⅓€‰₀¾ €–⅞¹”ᴹᴰ⅞⅛⅔⅔ᶜᴿ€⅛ᴸᶠPₜ⅛¹Nº
fi⅝²⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pₜᴹᴰ⅞⅓⅔ᶜᴿ€⅛ᴸᶠPₜ⅛¹Pₜ€–

Bharat Tanks & Vessels
●ᶜᴿPₜ “ᴸᶠ®€ᴸᶠ® “℗⅓ᶜᴿ₩⅓‰₀ ¡●⅓–⅓℠⅝ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸᶠᴸᶠ¾ ○¹Pₜ ®¥ —¥ ¤£ “℗⅓ᶜᴿᴸᶠ⅝– ○⅓℗⅓ᶜᴿ£ ‹⅓ᴴᵀ¹³⅜€£ ▪ⱽᵀ–⅝ ¥ ¢ºº³ª½£
●⅓®⅓ᶜᴿ⅓ᴸᶠ®ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€‰₀⅝¾ »¡¤º¿¥¤ⁿ½¼¢¢ⁿ©½ª
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡½ª¿¥¼ª®ⁿ®ª² ƒ»¡¤º¿¥¡½ª¿¥½®º¢²²º®
○⅓₦¾ »¡¤º¿¥¡½ª¿¥½®º¢©²ⁿ¼
›Nº¹⅓€‰₀¾ ⅔®⅓ᶜᴿ⅓ᴺᴸᴺᴸ⅓–℅uᴸᶠ”℗Nº¹⅓€‰₀Pₜ⅛¹Nº£
›Nº¹⅓€‰₀¾ ⅔®⅓ᶜᴿ⅓ᴺᴸᴺᴸ⅓–℅uᴸᶠ”☸ᴸᶠ–‰₀Pₜ–⅝ᴺᴸ

Reliable Thermocraft

Krish Engineering

Panchal Steel

Patel Enterprises, Udaipur

R. S. Samant Engineering Private Limited

PIPELINE, VALVES & ACCESSORIES

AKO UK Ltd

“⅜⅜ᶜᴿ⅝ᴸᶠᶠ¾ º½ ▫ᵛᵀᴺᴸ®⅝ᶜᴿ⅞¹ᶜᴿ⅜ fi⅓Rs£ ‹ᶜᴿ⅓RsᴺL¹– ○€⅝‰³⅜ᴸᶠ ‡–⅜ᵛᵀᴸᶠᴺᴸᶜᴿ€⅓‰ ›ᴸᶠᴺL⅓ᴺL⅝£ ‹⅓❁⅝–ᴺLᶜᴿRs£ ○¹ᶜᴿᴺL®⅓Nºᴴᵀᴺ¹–ᴸᶠ®€ᶜᴿ⅝£ ○○ºº ®flfi ›¥Nº⅓€‰¾ ⅝–ᶠᶠᵛᵀ€ᶜᴿRs”⅓℅¹¥❁⅓‰❁⅝ᴸᶠPt⅛¹Nº fi⅝⅔ᴸᶠ€ᴺL⅝¾ ₩₩₩Ptᴴᵀ€–⅛®¥❁⅓‰❁⅝ᴸᶠPt⅛¹Nº ff⅝‰⅝ᴴᵀ®¹–⅝¾ ªº¼½® ½½¼ªº®¼ ○⅓₦¾ ªº¼½® ¼º½²ⁿ² fi⅝⅔ᴸᶠ€ᴺL⅝¾ ®ᴺᴸᴺᴴᵀᴸᶠ¾ƒƒ₩₩₩Ptᴴᵀ€–⅛®¥❁⅓‰❁⅝ᴸᶠPt⅛¹Nº

SFFECO GLOBAL

“⅜⅜ᶜᴿ⅝ᴸᶠᶠ¾ ■Pt■Pt –¹₦ ½ⁿº¼º©£ ™“○$“£ ‹ᵛᵀ⅔⅓€£ ffiPt“Pt›Pt ff⅝‰¾ »¤®ºℂ¥©©ª¤©¤ª ○⅓₦¾ »¤®ºℂ¥©©ª¤©½½ ›Nº⅓€‰¾ €–⅞¹”ᴸᶠ⅞⅞⅝⅛¹℗‰¹²⅔⅓‰Pt⅛¹Nº fi⅝⅔ᴸᶠ€ᴺL⅝¾ ®ᴺᴸᴺᴴᵀᴸᶠ¾ƒƒ₩₩₩Ptᴸᶠᵀᴴᵀ⅞⅞⅝⅛¹℗‰¹²⅔⅓‰Pt⅛¹Nº

Spartan-Peripheral Devices

—⅓–⅓⅜⅛⅓ “⅜⅜ᶜᴿ⅝ᴸᶠᶠ¾º©® ™¹ᴸᶠ⅝ᴴᵀ® —⅓ᶜᴿᶜᴿ€⅝ᶜᴿ£ ffl⅓ᵛᵀ⅜ᶜᴿ⅝ᵛᵀ€‰£ □— ™®ffl ²ffl² ff⅝‰¾ ¡℃²ª¿ ℃½℃¥ⁿªⁿ® ff¹⁰‰‰ ○ᶜᴿ⅝⅝¾ ¡©ⁿⁿ¿ ℃½℃¥ⁿªⁿ® ○⅓₦¾¡℃²ª¿ ℃½℃¥ⁿª®º

United States

●⅓€‰€–℠ “⅜⅜ᶜᴿ⅝ᴸᶠᶠ¾ ■■ –¹₦ ○¹ ½½½℃£ —®⅓Nºᴴᵀ‰⅓€–£ ○... º½¤º¤¥½½½℃£ ºªª fi⅓‰–ᵛᵀᴺL –ᴺLᶜᴿ⅝⅝ᴺL£ —®⅓Nºᴴᵀ‰⅓€–£ ○... º½¤º¤ ff⅝‰¾ ¡℃²ª¿ ℃½℃¥ⁿªⁿ® ff¹⁰‰‰ ○ᶜᴿ⅝⅝¾ ¡©ⁿⁿ¿ ℃½℃¥ⁿªⁿ® ○⅓₦¾ ¡℃²ª¿ ℃½℃¥ⁿª®º fi⅝⅔ᴸᶠ€ᴺL⅝¾ ®ᴺᴸᴺᴴᵀᴸᶠ¾ƒƒ₩₩₩Ptᴸᶠᴴᵀ⅓ᶜᴿᴺL⅓–¥ᴴᵀ⅜Pt⅛¹Nº

Pneumadyne, Inc.

“⅜⅜ᶜᴿ⅝ᴸᶠᶠ¾ º℃℃½²ˣ ½¼ᶜᴿ⅜ “❁⅝–ᵛᵀ⅝ ○¹ᶜᴿᴺL®£ ■‰RsNº¹ᵛᵀᴺL®£ ●○ ²²℃℃®¥℃®ªⁿ ■®¹–⅝¾ ®ⁿ¼¥²²¤¥ª®®® ○⅓₦¾ ®ⁿ¼¥²²¤¥ª²℃® fi⅝⅔ᴸᶠ€ᴺL⅝¾ ®ᴺᴸᴺᴴᵀᴸᶠ¾ƒƒ₩₩₩Ptᴴᵀ–⅝ᵛᵀNº⅓⅜Rs–⅝Pt⅛¹Nº

EAGLE INDUSTRIES

“⅜⅜ᶜᴿ⅝ᴸᶠᶠ¾ –¥ºº£ –¹Nº²⅔⅓Rs fi€ᶜᴿ⅝ —¹Nºᴴᵀ‰⅝₦£ ‡Pt–Pt ■⅓ᴺL⅝‰ ▫¹¹⅓⅜£ □¹ᶜᴿ⅝℗⅓¹– ¡›¿£ ●ᵛᵀNº²⅔⅓€ ¥ ℃ªª ª¤¼Pt fi⅝‰⅝⅞⅛⅓₦¾ »¤ºPt½½Pt½ⁿ©² ¼©²© ›Nº⅓€‰¾ €–⅞¹”⅝⅛⅓℗‰⅝€–⅜ᵛᵀᴸᶠᴺLᶜᴿ€⅝ᴸᶠPt€–£ ›Nº⅓€‰¾ ⅓⅓‰¹℃”⅝⅛⅓℗‰⅝€–⅜ᵛᵀᴸᶠᴺLᶜᴿ€⅝ᴸᶠPt€– fi⅝⅔ᴸᶠ€ᴺL⅝¾ ®ᴺᴸᴺᴴᵀᴸᶠ¾ƒƒ₩₩₩Pt⅓℗‰⅝€–⅜ᵛᵀᴸᶠᴺLᶜᴿ€⅝ᴸᶠPt€–

Dynamic Controls & Services

“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ ▪‰₀¹ᴺᴸ ₀¹Pₜ º£ ‹¹¹ᶜᴿ ₀¹Pₜ ¼ƒ®£ ˢᴹᶜᴿ€ᴸᶠ®–⅓❁⅝–€ “NºNº⅓‰ –ᴺᴸᶜᴿ⅝⅝ᴺᴸ£
ff®€ᶜᴿᵛᵀNº⅓‰₀⅓€ ₀⅓⁽ᴹ⁾⅓ᶜᴿ£ ▫⅓Nº⅓ᴴᵀᵛᵀᶜᴿ⅓Nº£ —®⅝––⅓€ – ⁿᵃᵃᵃ©¤£ ff⅓Nº€‰ ₀⅓³⁄₈ᵛᵀ£
‡–³⁄₈€⅓
℞⅓–³⁄₈‰€–⅝ ▪®¹–⅝¾ »¤º¥¢₵¥½₵©ⁿ¼°°°
●¹²⁄₃€‰₀⅝ ▪®¹–⅝¾ »¤º¥¤©₵ª©¤©ª¹¼
●¹²⁄₃€‰₀⅝ ▪®¹–⅝¾ »¤º¥¤®®¤¤®¹½¼¢½
›N⅓€‰¾ ᴸᶠ⅓‰₀⅝ᴸᶠ”³⁄₈Rs–⅓Nº€⅛⅛¹–ᴺᴸᶜᴿ¹⁰‰₀ᴸᶠPₜ€–
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀᴸᶠ¾ƒƒ₩₩₩Pₜ³⁄₈Rs–⅓Nº€⅛⅛¹–ᴺᴸᶜᴿ¹⁰‰₀ᴸᶠPₜ€–

Gokul Plast

—¹–ᴺᴸ⅓⅛ᴺᴸ ▪⅝ᶜᴿᴸᶠ¹–¾ ˢᴹ⅓Nº‰₀⅝ᴸᶠ® ▪⅓ᴺᴸ⅝‰ ¡▪ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺᴸ¹ᶜᴿ¿
“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ º©£ –®ᶜᴿ⅝⅝%€ ‡–³⁄₈ᵛᵀᴸᶠᴺᴸᶜᴿ€⅓‰ ▪⅓ᶜᴿ%£ –⅓%ᶜᴿ¹⁰‰ ▫¹¹⁄₈³⁄₈£
“®Nº⅝³⁄₈⅓²⁄₃⅓³⁄₈¥‡–³⁄₈¹ᶜᴿ⅝ †€⁽ᴹ⁾₩⅓Rs£ ff⅓‰Pₜ ‹⅓ᴸᶠ%ᵘᶜᴿ¹€£ “ff ▪¹ᴸᶠᴺᴸ –⅓%ᵘᶜᴿ¹⁰‰
–ᵛᵀ%ᶜᴿ⅓–⁽ᴹ⁾£ “®Nº⅝³⁄₈⅓²⁄₃⅓³⁄₈ ¥ ¼⁰¹½₵¹⁄₄ª£ □ᵛᵀ%⅓ᶜᴿ⅓ᴺᴸ£ ‡–³⁄₈€⅓
●¹²⁄₃€‰₀⅝¾ »¡¤º¿ ¥ ¤₵½ⁿ¤¼®²²©£ »¡¤º¿ – ¤®⁰¹½¤¼®²²©
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ³⁄₄ƒƒ₩₩₩Pₜ⁽ᴹ¹⁾%ᵘᵛᵀ‰₀ᴴᵀ%₀₀⅓ᴸᶠᴺᴸPₜ⅛¹Nº

Param Engineering

™¹⅓⁽ᴹ⁾³⁄₈€ᴸᶠ® ▪⅓–⅛®¹⅓‰₀ ¡—›■¿
“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ º£ □€ᶜᴿ€❁⅓ᶜᴿ □‰₀¹²⁄₃⅝ ‡–³⁄₈ᵛᵀᴸᶠᴺᴸᶜᴿ€⅓‰₀ ▪⅓ᶜᴿ%£ ₀⅝⅓ᶜᴿ ●⅓³⁄₈®ᵛᵀᶜᴿ⅓Nº
›ᴸᶠᴺᴸ⅓ᴺᴸ⅝£ ▫¹ᵛᵀᴺᴸ⅝ ■– –Pₜ ▪Pₜ ▫€–⁽ᴹ⁾ ▫¹¹⁄₃³⁄₈£ ■³⁄₈®¹⁄₃❁£ ■³⁄₈®⅓❁ ‡–³⁄₈ᵛᵀᴸᶠᴺᴸᶜᴿ€⅓‰₀
›ᴸᶠᴺᴸ⅓ᴺᴸ⅝£ “®Nº⅝³⁄₈⅓²⁄₃⅓³⁄₈ ¥ ¼⁰¹½₵⁰²£ □ᵛᵀ%⅓ᶜᴿ⅓ᴺᴸ£ ‡–³⁄₈€⅓
●¹²⁄₃€‰₀⅝¾ »¤º¥¤®¹½₵ⁿ®®ªª¤£ »¤º¥¤¢¹½ⁿª®®®ⁿⁿ
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¤º¥®¤¥½¹½¤®¹½©²ⁿ
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ³⁄₄ƒƒ₩₩₩Pₜ⅝‰₀⅝⅛¹⁄₈¹–ᴺᴸᶜᴿ¹⁰‰₀ᴴᵀ⅓–⅝‰₀ᴸᶠPₜ⅛¹Nº

Amanat Steels Private Limited

▫¹⁰€ᴺᴸ‹¹ᴸᶠ®€ ¡‹€ᶜᴿ⅝⅛ᴺᴸ¹ᶜᴿ¿
“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ ₀¹Pₜ ²₵£ ₀⅝⅝‰₀⅓–⅓³⁄₈⅓–£ –®¹ᴴᵀ ₀¹Pₜ ¤ ºᴸᶠᴺᴸ —⅓ᶜᴿᴴᵀ⅝–ᴺᴸ⅝ᶜᴿ –ᴺᴸᶜᴿ⅝⅝ᴺᴸ£
●ᵛᵀNº²⁄₃⅓€ ¥ ₵ª⁽ᵃ⁾ª⁽ᵃ⁾₵£ ●⅓⁽ᴹ⁾⅓ᶜᴿ⅓ᴸᶠ®ᴺᴸᶜᴿ⅓£ ‡–³⁄₈€⅓
●¹²⁄₃€‰₀⅝¾ »¤º¥¤®½ª½ª⁽ᵃ⁾₵º½£ »¤º¥¤®½ª²²ª²²ⁿ
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¤º¥½½¥ⁿⁿ¼©º¹¼¼º£ »¤º¥½½¥ⁿ®¢¼©ª⁽ᵃ⁾ⁿ
○⅓₦¾ »¤º¥½½¥½¼©º⁰¹¼¼°
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ³⁄₄ƒƒ₩₩₩Pₜ⅓Nº⅓–⅓ᴺᴸᴸᶠᴺᴸ⅝⅝‰₀ᴸᶠPₜ–⅝ᴺᴸ

Sree Krishnaa Industries

▫Pₜ ●⅓³⁄₈⅓❁⅓– ¡●⅓–⅓⁽ᴹ⁾⅝ᶜᴿ¿
“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ □– ₀¹Pₜ ¤½ƒº£ –€ᴺᴸ⅝ ₀¹Pₜ ¼½£ ›‰₀⅓–⁽ᴹ⁾ ₀⅓⁽ᴹ⁾⅓ᶜᴿ£
“❁⅓ᶜᴿ⅓Nº⅛⅛‰₀⅓Rs⅓Nº£ □⅓–⅓ᴴᵀ⅓ᴺᴸ®Rs ▪¹ᴸᶠᴺᴸ£ □⅓–⅓ᴴᵀ⅓ᴺᴸ®Rs ₀⅓⁽ᴹ⁾⅓ᶜᴿ£
—¹€Nº²⁄₃⅓ᴺᴸ¹ᶜᴿ⅝ ¥ ⁿ₵ºª⁽ᵃ⁾ⁿ£ ff⅓Nº€‰₀ ₀⅓³⁄₈ᵛᵀ£ ‡–³⁄₈€⅓
●¹²⁄₃€‰₀⅝¾ »¤º¥¤¤₵₵²¹⁄₄¼©©©£ »¤º¥¤®¤₵₵₵ⁿ®¤
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¤º¥₵½½¥½²ⁿ₵ª½®
○⅓₦¾ »¤º¥₵½½¥½²ⁿ₵ª½®
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ³⁄₄ƒƒ₩₩₩Pₜᴸᶠᶜᴿ⅝⅝%ᵘᶜᴿ€ᴸᶠ®–⅓⅓€–³⁄₈ᵛᵀᴸᶠᴺᴸᶜᴿ€⅝ᴸᶠPₜ⅛¹Nº

Super Scientific Works Private Limited

†€N⁰½–ᴸꜰ®ⱽᵀ ▪⅓ᶜᴿ€℅ᵘ® ¡ffl€⅛⅝ ▪ᶜᴿ⅝ᴸꜰ€⅜⅝–ᴺᴸ¿
“⅜⅜ᶜᴿ⅝ᴸꜰᴸꜰ¾ ›¥®ª ƒ®ºº£ –⅓ᶜᴿ⅜⅓ᶜᴿ ‡–⅜ⱽᵀᴸꜰᴺᴸᶜᴿ€⅓‰ ›ᴸꜰᴺᴸ⅓ᴺᴸ⅝£ “℅₩⅓ ▫11⅓⅜£
ffl⅓⅜¹³⅜⅓ᶜᴿ⅓ ¥ ¼¤ªªº¤£ □ⱽᵀ℅⅓ᶜᴿ⅓ᴺᴸ£ ‡–⅜€⅓
●¹²⅔€‰₀₀⅝¾ »¤º¥¤®®¤½ª¢©ªº£ »¤º¥©¤©ª®©©©®
ff⅝‰₀⅝ᴴᵀ®¹—⅝¾ »¤º¥½ⁿ²¥½²º¹½ª©©£ »¤º¥½ⁿ²¥½²ºº½®º
○⅓₦¾ »¤º¥½ⁿ²¥½²®º²²ª£ »¤º¥½ⁿ²¥½²®ª²ª
fi⅝²⅔ᴸꜰ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pₜᴸꜰⱽᵀᴴᵀ⅝⅝ᶜᴿᴸꜰ⅛€⅝–ᴺᴸ€⅞€⅛Pₜ⅛¹Pₜ€–

Rajveer Stainless & Alloys

ffⱽᵀᴸꜰ®⅓ᶜᴿ ™¹⅓€– ¡▪ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺᴸ¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸꜰᴸꜰ¾ ■⅞⅞€⅛⅝ ○¹Pₜ º®£ ½–⅜ ○‰₀₀¹¹ᶜᴿ£ –¹ᴴᵀ⅓ᶜᴿ€₩⅓‰₀⅓ –ⱽᵀ€‰₀₀³⁄₈€–℠ ○⅝⅓ᶜᴿ
□ⱽᵀ‰₀⅓‰₀₩⅓⅜€£ ºª®£ ºª¤£ ˢᴹ€℅⅓ –ᴺᴸᶜᴿ⅝⅝ᴺᴸ£ ●ⱽᵀNº²⁄₃⅓€ ¥ ¢ªªªª¢£
●⅓®⅓ᶜᴿ⅓ᴸꜰ®ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€‰₀₀⅝¾ »¤º¥¤ªª¢©©¢©©¹⁄₄¼
ff⅝‰₀⅝ᴴᵀ®¹—⅝¾ »¤º¥½½¥ⁿⁿ²¤²¹½¤©£ »¤º¥¹½½¥ⁿⁿ¹⁄₄ⁿ¹⁄₄º℠®
fi⅝²⅔ᴸꜰ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pₜᶜᴿ⅓℅☢⅝⅝ᶜᴿᴸꜰᴺᴸ⅓€–‰₀⅝ᴸꜰᴸꜰPₜ€–

CONTROL PANEL

Sai System & Control
–®⅓⊛€– ●¹℅u⅓–€ ¡▪ᶜR¹ᴴTᶜR€⅝ᴺL¹ᶜR¿
“³⁄₈³⁄₈ᶜR⅝ᴸFᴸF¾ ○¹Pt ½ª¥½º£ ▫ⱽT³⁄₈ᶜR⅓℅uᴸF® —¹Nºᴴ T‰⁵⁄₈₦£ ○⅝⅓ᶜR □⅓Rs⅓ᴺLᶜR€
▫⅝ᴸFᴺL⅓ⱽTᶜR⅓–ᴺL ▪®⅓ᴸF⅝ ¼£ □‡‹—£ ffl⅓ᴺL⊛⅓£ “®Nº⅝³⁄₈⅓²⁄₃⅓³⁄₈ ¥ ¼©½¢⁄²£
□ⱽT℅⅓ᶜR⅓ᴺL£ ‡–³⁄₈€⅓
●¹²⁄₃€‰⅝¾ »¤º¥¤®½¢¼®©ª®º£ »¤º¥¤¤½²²®©ª®º
ff⅝‰⅝ᴴT®¹–⅝¾ »¤º¥®¤¥½²©¤²¤¤ⁿ
fi⅝²⁄₃ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩Pt ᴸF⅓€ᴸFRsᴸFᴺL⅝Nº⅛¹–ᴺLᶜR¹‰Pt–⅝ᴺL

Sanjay Technical Services Private Limited
...Pt “℅⅓Rs —®¹₩³⁄₈⅓ᶜRRs ¡‹€ᶜR⅝⅛ᴺL¹ᶜR¿
–⅓–℅⅓Rs —®¹₩³⁄₈⅓ᶜRRs
“³⁄₈³⁄₈ᶜR⅝ᴸFᴸF¾ ○¹Pt ‹¥¼©£ ▪®⅓ᴸF⅝ ¢ ›₦ᴺL⅝–ᴸF€¹–£ ‡‹“ ™⅝⅝³⁄₈€Nº⅝ᴺL‰⁰⁄₀³⁄₃£
†Rs³⁄₈⅝ᶜR⅓²⁄₃⅓³⁄₈ ¥ ²ªªª²²£ ff⅝‰⅓–℠⅓–⅓£ ‡–³⁄₈€⅓
●¹²⁄₃€‰⅝¾ »¤º¥¤©¢¤²º¼ªªº£ »¤º¥©®¤ª½¼¢¤¤¢
ff⅝‰⅝ᴴT®¹–⅝¾ »¤º¥¢ª¥½¼ª¤²²²©£ »¤º¥¢ª¥½¼ª¤º½º®
○⅓₦¾ »¤º¥¢ª¥½¼ª¤º½½½
fi⅝²⁄₃ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩Pt‰ᴺL⅓–³⁄₈®ᴺLᴴT⅓–⅝‰ᴸFPt⅛⁷Nº

Aishwarya Enterprises
ffiNº⅓ –⅓–℅u⅓ᶜRˢᴹ– ¡▪ᶜR¹ᴴTᶜR€⅝ᴺL¹ᶜR¿
●ᶜRPt –Pt “–⅓–ᴺL®⅓ ˢᴹⱽTNº⅓ᶜR –
“³⁄₈³⁄₈ᶜR⅝ᴸFᴸF¾ ¼¼¢ƒº ○£ “℠⅓ᶜR₩⅓‰ –⅛®¹¹‰ ▫¹¹⅓³⁄₈£ ˢᴹ○□
▪ⱽT³⁄₈ⱽTᶜR▪€ᶜR€⊛ⱽTff®⅓³⁄₈⅓℠Nº ▫¹¹⅓³⁄₈£ ■ᴴTᴴT¹ᴸF€ᴺL⅝ ff¹ ▫⅓ᴺL®–⅓Nº ▪⅝ᴺLᶜR¹‰ –ⱽT–℅£
—¹€º²⁄₃⅓ᴺL¹ᶜR⅝ ¥ ⁿ¢ºº²®£ ff⅓Nº€‰ ○⅓³⁄₈ⱽT£ ‡–³⁄₈€⅓
●¹²⁄₃€‰⅝¾ »¤º¥¤®¢½º¼²®©ºº£ »¤º¥®¼®¹⁄₄ª¼²®©º
ff⅝‰⅝ᴴT®¹–⅝¾ »¤º¥¢½½¥ⁿ²²½¼®½
fi⅝²⁄₃ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩Pt⅓€ᴸF®₩⅓ᶜRRs⅓⅝–ᴺL⅝ᶜRᴴTᶜR€ᴸF⅝ᴸFPt⅛¹Pt€–

Dayanidhi Enterprise
▪ᶜR⅓³⁄₈€ᴴT ▪⅓ᴺL⅝‰ ¡▪ᶜR¹ᴴTᶜR€⅝ᴺL¹ᶜR¿
“³⁄₈³⁄₈ᶜR⅝ᴸFᴸF¾ —ƒⁿ¢£ $⅓⊛⅝ᶜR€ ‡–³⁄₈ⱽTᴸFᴺLᶜR€⅓‰ ›ᴸFᴺL⅓ᴺL⅝£ –⅝®€–³⁄₈ ˢᴹ⅓ᴺL®₩⅓³⁄₈⅓£
□Pt‡Pt‹Pt—Pt –€–℠⅓ᶜR⊛⅓¥ˢᴹ⅓ᴺL®₩⅓³⁄₈⅓ ▫¹¹⅓³⁄₈£ ˢᴹ⅓ᴺL®₩⅓³⁄₈⅓£ “®Nº⅝³⁄₈⅓²⁄₃⅓³⁄₈ ¥
¼©½¢⁄¼ª£ □ⱽT℅⅓ᶜR⅓ᴺL£ ‡–³⁄₈€⅓
●¹²⁄₃€‰⅝¾ »¤º¥¤¢½ⁿ¼ⁿº©¢½
fi⅝²⁄₃ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩Pt³⁄₈⅓Rs⅓–€³⁄₈®€⅓ⱽTᴺL¹Nº⅓ᴺL€¹–Pt⅛¹Nº

Ingenium Electronics Pvt. Ltd.
‹®⅓–⅓–℅⅓Rs –Pt ▪⅓ᴺL®⅓℅u ¡‹€ᶜR⅝⅛ᴺL¹ᶜR¥ –ⱽTᴸF€–⅝ᴸFᴸF ‹⅝⊛⅝‰¹ᴴTNº⅝–ᴺL¿
“³⁄₈³⁄₈ᶜR⅝ᴸFᴸF¾ ○¹Pt ®£ –⅓Nº€ᴺLᶜR⅓ –¹¹⁄₈€⅝ᴺLRs£ ○⅝⅓ᶜR ▫⅓℅€₩⅓³⁄₈⅝ □⅓ᶜR³⁄₈⅝–£
–⅓®¹⁄₃℅u⅓ᶜR–⅓℠⅓ᶜR ○¹Pt ½ ▪⅓ᶜR⊛⅓ᴺL€£ ▪ⱽT–⅝ ¥ ¢ºªª¤£ ●⅓®¹⁄₃⅓ᶜR⅓ᴸF®ᴺLᶜR⅓£ ‡–³⁄₈€⅓
●¹²⁄₃€‰⅝¾ »¤º¥¤®½½¢½¤¤¤ⁿ
ff⅝‰⅝ᴴT®¹–⅝¾ »¤º¥½ª¥½¢½¼ª²º²½
fi⅝²⁄₃ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩Pt€–℠⅝–€ⱽTNº‰⅓²⁄₃ᴸFPt⅛¹Nº

Zplus Holograms (Brand Of Divya Impex)

ffl€–⅝⅝ᴺ└® –®⅓–⅜⅓ᶜᴿ€ ¡—›■¿
“⅜⅜ᶜᴿ⅝└ᶠ└ᶠ¾ ºº¢£ ▪⅓–ᴺ└®⅓ᶜᴿ⅓ᴴᵀ⅓%₀₀Rs⅓£ ˢᴹ⅝–Ⓜ⅝ᶜᴿ€†¹²⅔%₀€○⅓Rs⅓–⅜⅓®⅓%₀₀%₀₀€£
■⅞⅞ ●Rs└ᶠ¹ᶜᴿ⅝ ▫¹¹⅓⅜£ –⅝–Ⓜ⅓%₀ⱽᵀᶜᴿⱽᵀ ¥ ²ⁿªª¼¤£ ˢᴹ⅓ᶜᴿ–⅓ᴺ└⅓%ᵤ⅓£ ‡–⅜€⅓
●¹²⅓€%₀₀⅝¾ »¤º¥¤¼¢ºª¼½¼½ª£ »¤º¥©º½¼®½©©®½
ff⅝%₀₀⅝ᴴᵀ®¹–⅝¾ »¤º¥©ª¥½©ⁿªº¢¼ª£ »¤º¥©ª¥½©ⁿªº¢ª²
fi⅝²⅓└ᶠ€ᴺ└⅝¾ ®ᴺ└ᴺ└ᴴᵀ¾ƒƒ₩₩₩Pₜ²⅓®⅓–⅜⅓ᶜᴿ€℠ᶜᴿ¹ⱽᵀᴴᵀ€–⅜€⅓Pₜ⅛¹Nº

Mahesh Engineering Works, Mumbai

†€ᶜᴿ⅓%₀⅓%₀■⅓–⅛®⅓%₀¡■ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺ└¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝└ᶠ└ᶠ¾ ¤½¥–£ …ⱽᵀ└ᶠⱽᵀ⅞ —¹Nºᴴᵀ¹ⱽᵀ–⅜£ —®ⱽᵀᶜᴿ€₩⅓⅜€£ □¹ᶜᴿ⅝Ⓜ⅓¹– ›⅓└ᶠᴺ└£
●ⱽᵀNº⅔⅓€ ¥ ¢ªªªⁿ¼£ ●⅓®⅓ᶜᴿ⅓└ᶠ®ᴺ└ᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€%₀₀⅝¾ »¤º¥¤©½ºº¢¼¤ⁿ²
ff⅝%₀₀⅝ᴴᵀ®¹–⅝¾ »¤º¥½½¥½¤½©ⁿ¤½ª
fi⅝²⅓└ᶠ€ᴺ└⅝¾ ®ᴺ└ᴺ└ᴴᵀ¾ƒƒ₩₩₩PₜNº⅓℗⅝└ᶠ℗⅝–Ⓜ€–⅝⅝ᶜᴿ€–ᴹPₜ⅛¹Nº

Royal Pack Industries

–®⅓ᶜᴿ⅓⅜ ▪⅓ᴺ└€%₀ ¡▪ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺ└¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝└ᶠ└ᶠ¾ □⅓%₀⅓ ○¹Pₜ ºªƒ–£ –ⱽᵀᶜᴿ⓪⅝Rs ‡–⅜ⱽᵀ└ᶠᴺ└ᶜᴿ€⅓%₀ ›└ᶠᴺ└⅓ᴺ└⅝£ □ᶜᴿ¹ⱽᵀ–⅜
○%₀¹¹ᶜᴿ£ □¹ᶜᴿ⅝Ⓜ⅓¹– ›⅓└ᶠᴺ└ –¹–⅓₩⅓%₀⅓ —ᶜᴿ¹└ᶠ└ᶠ ▫¹¹⅓⅜ ○¹Pₜ ºº£ ○⅝⅓ᶜᴿ †¹ᴺ└⅝%₀
ˢᴹ⅓ᶜᴿ⅓– ▪⅓%₀⅓⅛⅝ ¶ ▫⅓€%₀₩⅓Rs –ᴺ└⅓ᴺ└€¹–£ ●ⱽᵀNº⅔⅓€ ¥ ¢ªªªⁿ¼£
●⅓®⅓ᶜᴿ⅓└ᶠ®ᴺ└ᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€%₀₀⅝¾ »¤º¥¤©¼¼®²¼®²¢£ »¤º¥¤©¤½¼¼²²¹¼ª
ff⅝%₀₀⅝ᴴᵀ®¹–⅝¾ »¤º¥½½¥¢¹½ⁿ¢½©ⁿ²£ »¤º¥½½¥¹½²ⁿ©²ª¹½¢ª
○⅓ℕ¾ »¤º¥½½¥½ⁿ©²ª¼ª®
fi⅝²⅓└ᶠ€ᴺ└⅝¾ ®ᴺ└ᴺ└ᴴᵀ¾ƒƒ₩₩₩Pₜ└ᶠ⅝⅓%₀€–Ⓜ¥€–⅜€⅓Pₜ⅛¹Nº

BLOWER

Yagnam Pulverizer Private Limited
–ᵛᵀ₨⅓ᴸᶠ® ˢᴹ⅓‰₀⅓ᴸᶠ℃ᵤ⅓ᶜᴿ ¡●⅓–⅓℠€–℠ ‹€ᶜᴿ⅝⅛ᴺᴸ¹ᶜᴿ¿
“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ ▪‰₀¹ᴺᴸ ₀¹Pₜ ▫ ¥ ©ⁿ¤£ ▫⅓²⁄₃⅓‰⅝ ●Pₜ ‡Pₜ ‹Pₜ —P₹£ ff℗⅓–⅝ ¥ –⅝‰₀⅓ᴴᵀᵛᵀᶜᴿ
▫¹¹⁄₃³⁄₈£ ₀⅓❂€ ●ᵛᵀN⁰²⁄₃⅓€ ¥ ¢ªª®ªº£ ●⅓℗⅓ᶜᴿ⅓ᴸᶠ℗ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⁄₃€‰₀⅝¾ »¡¤º¿¥¤¼½ºⁿº¼º¹¼¤ƒ»¡¤º¿¥¤¼½ªº®¤®®ⁿ
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡½½¿¥½®ⁿ¤©©¹½¢ƒ »¡¤º¿¥¡½½¿¥½®ⁿ¤©©¼º
○⅓₪¾ »¡¤º¿¥¡½½¿¥½®ⁿ¤©©¹½²
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩PₜRs⅓℠–⅓NºN°€‰₀‰₀Pₜ⅛¹Nº

Desol Associated Engineers (an Iso 9001-2008 Certified Company)
–ᵛᵀ❂€–⅓Rs ●⅓ᴺᴸ℗ᵛᵀᶜᴿ ¡–›■¿
“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ “¥®ƒºº©¥ºº©£ –Pₜ –Pₜ □Pₜ ffPₜ ‡–⅜ᵛᵀᴸᶠᴺᴸᶜᴿ€⅓‰ “ᶜᴿ⅝⅛£ □℗⅓ᴹᴰ€⅓²⁄₃¹⁄₃³⁄₈ ¥
½ªº¤ª¤£ ffiᴺᴸᴺᴸ⅓ᶜᴿ ▪ᶜᴿ⅓³⁄₈⅝ᴸᶠ®£ ‡–⅜€⅓
●¹²⁄₃€‰₀⅝¾ »¡¤º¿¥¤©¤¤¼ª½¼ⁿ½ƒ »¡¤º¿¥¤©ºº½ª½¼ⁿ½
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡º½ª¿¥ⁿ²º®¼⁴º²ƒ »¡¤º¿¥¡º½ª¿¥¢²ºⁿ¢ª
○⅓₪¾ »¡¤º¿¥¡º½ª¿¥¢²ºⁿ¢ª
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜ³⁄₈⅝ᴸᶠ¹⁰‰₀⅛ᶜᴿ⅓–⅝ᴸᶠPₜ⅛¹Nº

SMD Engineering Equipments & Systems
▫Pₜ ●¹℗⅓– ¡●⅓–⅓℠⅝ᶜᴿ¿
“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ ₀¹Pₜ ½£ ffl⅓ᶜᴿᶜᴿ€Rs⅓ᶜᴿ –ᴺᴸᶜᴿ⅝⅝ᴺᴸ£ ffl€❂⅝℃ᵤ⅓–⅓–⅜⅓ ₀⅓℠⅓ᶜᴿ£ “❂⅓⅜€£
—℗⅝––⅓€ ¥ ⁿªªª²¢£ ff⅓Nº€‰₀ ₀⅓⅜ᵛᵀ£ ‡–⅜€⅓
●¹²⁄₃€‰₀⅝¾ »¡¤º¿¥¤²²º⁰²ª²ª¢ƒ»¡¤º¿¥¤©©¢₵®½₵ⁿ¤
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡¢₵¿¥½¤ª¼ⁿ®ª²
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩PₜᴸᶠNº⅜⅛⅓ᶜᴿ²⁄₃¹–ᴺᴸ¹₩⅝ᶜᴿPₜ⅛¹Nº

Xtreme Mech X Perts
—Pₜ ˢᴹ⅓ᶜᴿᴺᴸ℗€⅛℃ᵤ ▪ᶜᴿ⅓²⁄₃℗ᵛᵀ ¡—℗€⅝⅞ ›₪⅝⅛ᵛᵀᴺᴸ€❂⅝¿
“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ ₀¹Pₜ ²ƒ¼£ “²⁄₃€ᴿ⅓Nº€ ₀⅓℠⅓ᶜᴿ£ □⅓–⅓ᴴᵀ⅓ᴺᴸ℗Rs£ —¹€Nº²⁄₃⅓ᴺᴸ¹ᶜᴿ⅝ ¥ ⁿ¢ºªªⁿ£
ff⅓Nº€‰₀ ₀⅓⅜ᵛᵀ£ ‡–⅜€⅓
●¹²⁄₃€‰₀⅝¾ »¡¤º¿¥¤©¢½ª¤¼¢º¢
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜ₪ᴺᴸᶜᴿ⅝Nº⅝Nº⅝⅛℗Pₜ⅛¹Pₜ€–

Airmass Engineers
●⅓–€ᵤ⅓–⅜⅓– ˢᴹPₜ ¡▪ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺᴸ¹ᶜᴿ¿
“³⁄₈³⁄₈ᶜᴿ⅝ᴸᶠᴸᶠ¾ ₀¹Pₜ ®¼ƒ“£ ₀⅝₩ ₀¹Pₜ ©¤£ –⅝⅝Rs⅓‰₀ᵛᵀNº ºᴸᶠᴺᴸ –ᴺᴸᶜᴿ⅝⅝ᴺᴸ£
ff℗€‰₀₀€❂⅓℃ᵤ℃ᵤ⅓Nº£ ₀⅝⅓ᶜᴿ ‡—○ ○⅓⅛ᴺᴸ¹ᶜᴿRs
—℗⅝––⅓€ ¥ ⁿªªª¢¤£ ff⅓Nº€‰₀ ₀⅓⅜ᵛᵀ£ ‡–⅜€⅓
●¹²⁄₃€‰₀⅝¾ »¡¤º¿¥®½¤¤ª²²¤ª²ƒ»¡¤º¿¥®½¤¤ª²²¤ª¢
ff⅝‰₀⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡¢₵¿¥½ⁿº®ⁿ©®²
fi⅝²⁄₃ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜ⅓€ᶜᴿNº⅓ᴸᶠᴸᶠ⅝–℠–⅝⅝ᶜᴿᴸᶠPₜ⅛¹Nº

INSTRUMENTATION

CONTROLS INSTRUMENTS INDIA

“³⁄₈³⁄₈ᶜᴿ⁵⁄₈ᴸᶠᴸᶠ¾ ¢©®ƒ²²£ ○1⁄3ᴺᴸ€¹–1⁄3‰ ●1⁄3ᶜᴿ℃ᵤ⁵⁄₈ᴺᴸ£ ▪⁵⁄₈⁵⁄₈ᶜᴿ1⁄3□1⁄3ᶜᴿ®€£ ○⁵⁄₈₩ ‹⁵⁄₈‰®€ ¥ ºº²ª©® ‡○‹‡“

●1²⁄₃Pₜ¾ »¤º¥ ¤©ⁿ©º²©¤ª¤

›¥Nº1⁄3€‰¾ €–⁷⁄₈¹”1⁄₈¹–ᴺᴸᶜᴿ¹‰₀ᴸᶠ€–ᴸᶠᴺᴸᶜᴿᵛᵀNº⁵⁄₈–ᴺᴸᴸᶠPₜ1⁄₈¹Nº

fi⁵⁄₈²⁄₃ᴸᶠ€ᴺᴸ⁵⁄₈¾ ®ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pₜ1⁄₈¹–ᴺᴸᶜᴿ¹‰₀ᴸᶠ€–ᴸᶠᴺᴸᶜᴿᵛᵀNº⁵⁄₈–ᴺᴸᴸᶠPₜ1⁄₈¹Nº

Khera Instruments Pvt. Ltd.

“³⁄₈³⁄₈ᶜᴿ⁵⁄₈ᴸᶠᴸᶠ¾ ●¥¢£ “ᶜᴿ1⁄3³⁄₈®–1⁄3 –®1⁄3₩1⁄3– —¹NºNº⁵⁄₈ᶜᴿ1⁄₈€1⁄3‰ —¹Nºᴴᵀ‰₀⁵⁄₈₦£ “ᴹᴰ1⁄3³⁄₈ᴴᵀᵛᵀᶜᴿ ○⁵⁄₈₩ ‹⁵⁄₈‰₀®€ ¥ ºº²ª¼¼£ ‡–³⁄₈€1⁄3

●1²⁄₃Pₜ¾ »¤º¤©ºª²ª®ª¢²®

›¥Nº1⁄3€‰¾ €–⁷⁄₈¹”℃ᵤ®⁵⁄₈ᶜᴿ1⁄3⁵⁄₈₦€NºPₜ1⁄₈¹Nº

fi⁵⁄₈²⁄₃ᴸᶠ€ᴺᴸ⁵⁄₈¾ ®ᴺᴸᴺᴸᴴᵀᴸᶠ¾ƒƒ₩₩₩Pₜ℃ᵤ®⁵⁄₈ᶜᴿ1⁄3⁵⁄₈₦€NºPₜ1⁄₈¹Nº

New Era Converting Machinery

“³⁄₈³⁄₈ᶜᴿ⁵⁄₈ᴸᶠᴸᶠ¾ ½¼² ●1⁄₈Rˣ⁵⁄₈1⁄3– –‰₀❂³⁄₈Pₜ ▪1⁄3ᴺᴸ⁵⁄₈ᶜᴿᴸᶠ¹–£ ○™ ª®²ª¢

▪®¹–⁵⁄₈ ¥ ¡½²ª¿ ⁿ®ª¥¢©¢©

›Nº1⁄3€‰₀ ¥€–⁷⁄₈¹”–⁵⁄₈₩⁵⁄₈ᶜᴿ1⁄3¹⁄₈¹–❂⁵⁄₈ᶜᴿᴺᴸ€–ᴹPₜ1⁄₈¹Nº

fi⁵⁄₈²⁄₃ᴸᶠ€ᴺᴸ⁵⁄₈¾ ®ᴺᴸᴺᴸᴴᵀᴸᶠ¾ƒƒ–⁵⁄₈₩⁵⁄₈ᶜᴿ1⁄3¹⁄₈¹–❂⁵⁄₈ᶜᴿᴺᴸ€–ᴹPₜ1⁄₈¹Nº

MACQUINO INNOVATIONS LLP

“³⁄₈³⁄₈ᶜᴿ⁵⁄₈ᴸᶠᴸᶠ¾ ©ª¼£ ©ᴺᴸ® ○‰₀¹¹ᶜᴿ£ –1⁄3℃ᵤ1⁄3ᶜᴿ ¤ ○ᶜᴿPₜ ■‰₀³⁄₈ ▫–‡ –1⁄3–℃ᵤ£ “ᴸᶠ®ᶜᴿ1⁄3Nº ▫¹¹⁄₃³⁄₈

○ᶜᴿPₜ —€ᴺᴸRs □¹‰₀³⁄₈£ “®Nº⁵⁄₈³⁄₈1⁄3²⁄₃1⁄3³⁄₈ ¼©ªªª¤£ □ᵛᵀ℃ᵤ1⁄3ᶜᴿ1⁄3ᴺᴸ ¡‡–³⁄₈€1⁄3¿Pₜ

—¹–ᴺᴸ1⁄3¹⁄₈ᴺᴸ¾ »¤º ¤ª©º¹ⁿ ©©©ªª³¥ºª ¡ºº ℞€–⁵⁄₈ᴸᶠ¿

›Nº1⁄3€‰₀¾ €–⁷⁄₈¹”Nº1⁄3¹⁄₈ᶠᴸᵛᵀ€–¹Pₜ1⁄₈¹Nº

fi⁵⁄₈²⁄₃ᴸᶠ€ᴺᴸ⁵⁄₈¾ ®ᴺᴸᴺᴸᴴᵀᴸᶠ¾ƒƒNº1⁄3¹⁄₈ᶠᴸᵛᵀ€–¹Pₜ1⁄₈¹Nº

Kaapi Solutions India Opc Pvt Ltd.

“³⁄₈³⁄₈ᶜᴿ⁵⁄₈ᴸᶠᴸᶠ¾ —¹ᶜᴿᴴᵀ¹ᶜᴿ1⁄3ᴺᴸ⁵⁄₈ ■⁷⁄₈⁷⁄₈€1⁄₈⁵⁄₈¾ “ – ¼£ †¹–³⁄₈1⁄3 –€–℗® ●1⁄3ᶜᴿ℗£ ○1⁄3ᶜᴿ1⁄3€–1⁄3

‡–³⁄₈ᵛᵀᴸᶠᴺᴸᶜᴿ€1⁄3‰ “ᶜᴿ⁵⁄₈1⁄3 ▪®1⁄3ᴸᶠ⁵⁄₈ – º£ ○⁵⁄₈1⁄3ᶜᴿ ▪ffl▫ —€–⁵⁄₈Nº1⁄3 ○⁵⁄₈₩ ‹⁵⁄₈‰₀®€ – ºº²ª½©£

‡–³⁄₈€1⁄3

›Nº1⁄3€‰₀¾ €–⁷⁄₈¹”℃ᵤ1⁄3¹⁄₃ᴴᵀ€ᴸᶠ1‰₀ᵛᵀᴺᴸ€¹–ᴸᶠPₜ1⁄₈¹Nº

●1²⁄₃€‰₀⁵⁄₈¾ »¤º ¤²ⁿª³ⁿ½½¤®

fi⁵⁄₈²⁄₃ᴸᶠ€ᴺᴸ⁵⁄₈¾ ®ᴺᴸᴺᴸᴴᵀ¾ƒƒ₩₩₩Pₜ℃ᵤ1⁄3¹⁄₃ᴴᵀ€ᴸᶠ1‰₀ᵛᵀᴺᴸ€¹–ᴸᶠPₜ1⁄₈¹Nº

PIPELINES AND PUMPS

Superior Steel Overseas

“ᴸꜰ®¹ᶜ⁄ᵤ ●⅝®ᴺᴸ⅓ ¡›₦ᴴᵀ¹ᶜᴿᴺᴸ †■‹¿
●ᶜᴿPₜ –⅓–℅⅓Rs ●⅝®ᴺᴸ⅓
“⅜⅜ᶜᴿ⅝ᴸꜰᴸꜰ¾ ●⅓ᶜᴿ⅜€⅓ –®⅓☸⅓–£ ⁿᴺᴸ® ℠®⅝ᴺᴸ₩⅓⅜€£ ●ⱽᵀN⁰²⅔⅓€ ¥ ¢ªªªª¢£
●⅓®⅓ᶜᴿ⅓ᴸꜰ®ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿¥¤©º¤ⁿº®¼ª¼
ff⅝‰⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡½½¿¥ⁿⁿ½®®¤ªªª£ »¡¤º¿¥¡½½¿¥½¼®®®¤®¤
○⅓₦¾ »¡¤º¿¥¡½½¿¥½¼©²²®º¤
fi⅝²⅔ᴸꜰ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜᴸꜰⱽᵀᴴᵀ⅝ᶜᴿ€¹ᶜᴿᴸꜰᴺᴸ⅝⅝‰€–⅜ⱽᵀᴸꜰᴺᴸᶜᴿ€⅝ᴸꜰPₜ–⅝ᴺᴸ

Credence Engineers

–®⅓☸Rs⅓ ●⅝®ᴺᴸ⅓ ¡■⅓ᶜᴿᴺᴸ–⅝ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸꜰᴸꜰ¾ ■‰¹ᴺᴸ ○¹Pₜ ⁿ¼º£ ªªª£ –®⅝⅜ “ᶜᴿ⅝⅓£ □‡‹—£ ffl⅓ᴴᵀ€ ¥ ¼¤ºº¤²£
□ⱽᵀ℅⅓ᶜᴿ⅓ᴺᴸ£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿¥®©©©¤®®¢¢½£ »¡¤º¿¥¤©½²º½®¢¢¼
ff⅝‰⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡½ⁿª¿¥½¢½®ºº½
fi⅝²⅔ᴸꜰ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜ⅛ᶜᴿ⅝⅜⅝–⅛⅝⅝–℠€–⅝⅝ᶜᴿᴸꜰPₜ–⅝ᴺᴸ

Visflow Helical Pumps

℠ⱽᵀN⁰⅓ᶜᴿ –®⅓⅜⅛ⱽᵀᶜᴿ€⅓ ¡●⅓–⅓℠⅝ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸꜰᴸꜰ¾ ºº²ƒº²£ “‰⅓Nºⱽᵀ ○⅓℠⅓ᶜᴿ£ ℠¹☸⅓€■ⱽᵀ⅜ⱽᵀᶜᴿ£ —¹€N⁰²⅔⅓ᴺᴸ¹ᶜᴿ⅝ ¥ ⁿ¢ºª¢½£
ff⅓Nº€‰ ○⅓⅜ⱽᵀ£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿¥¤¼ⁿ¼½½¼¢½¼£ »¡¤º¿¥©¢½©ºº©¼¢¢©
ff⅝‰⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡¢½½¿¥½ⁿª¤¢ª®£ »¡¤º¿¥¡¢½½¿¥½ⁿªⁿª©
○⅓₦¾ »¡¤º¿¥¡¢½½¿¥½ⁿª¢ª¼²
fi⅝²⅔ᴸꜰ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜᴸꜰ⅛ᶜᴿ⅝⅜ᵂᴴᵀⱽᵀN⁰ᴴᵀ€–⅜€⅓Pₜ⅛¹⅛¹Nº

National Engineering Co.

●Pₜ ℠Pₜ “®Nº⅝⅜ ¡‹€ᶜᴿ⅝⅛⅝ᴺᴸ¹ᶜᴿ ff⅝⅛®–€⅛⅓‰¿
“⅜⅜ᶜᴿ⅝ᴸꜰᴸꜰ¾ ºº£ —€ᶜᴿ⅛ⱽᵀᴸꜰ “☸⅝–ⱽᵀ⅝£ ℠¹⁰‰℃ᵤ⅓ᴺᴸ⅓ ¥ ®ªªª°®£ fi⅝ᴸꜰᴺᴸ –⅝–Ⓜ⅓‰£
‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿¥¤©¼º¼½²ª¤½
ff⅝‰⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡¼¼¿¥½½©¹¼²¤²¢
○⅓₦¾ »¡¤º¿¥¡¼¼¿¥½©ⁿ²ª°¢²
fi⅝²⅔ᴸꜰ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜ–⅓ᴺᴸ€¹–⅓‰⅝–Ⓜ€–⅝⅝ᶜᴿ€–Ⓜ⅛¹Pₜ⅛¹Pₜ€–

Leakless (india) Engineering

■☸⅝ᴸꜰ® –⅓‰⅝Nº⅓ ¡■⅓ᶜᴿᴺᴸ–⅝ᶜᴿ¿
●ᶜᴿPₜ ‡⅜ᶜᴿ€ᴸꜰ–⅓‰⅝Nº⅓
“⅜⅜ᶜᴿ⅝ᴸꜰᴸꜰ¾ ○¹Pₜ º½½£ ffl€–⅓Rs †⅝⅓☸Rs ‡–⅜ⱽᵀᴸꜰᴺᴸᶜᴿ€⅓‰ ›ᴸꜰᴺᴸ⅓ᴺᴸ⅝£ ○⅝⅓ᶜᴿ
‡–¹ᶜᴿ⅔€ᴺᴸ ●⅓‰%£ ℞€–℃ᵤ€–Ⓜ ▫¹¹⅓⅜£ ●⅓‰⅓⅜ fi⅝ᴸꜰᴺᴸ£ ●ⱽᵀN⁰²⅔⅓€ ¥ ¢ªªªⁿ¢£
●⅓®⅓ᶜᴿ⅓ᴸꜰ®ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿¥¤©¤½¢º¢½¢²£ »¡¤º¿¥¤©½ª¼¢ⁿªⁿ¼
ff⅝‰⅝ᴴᵀ®¹–⅝¾ »¡¤º¿¥¡½½¿¥½©®½ⁿ®ª¼£ »¡¤º¿¥¡½½¿¥½©®²¢½¤¼
○⅓₦¾ »¡¤º¿¥¡½½¿¥½©®½ⁿ®ª¼
fi⅝²⅔ᴸꜰ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩PₜᴴᵀⱽᵀNºᴴᵀN⁰⅓–ⱽᵀ⅞⅛⅓⅛ᴺᴸⱽᵀᶜᴿ⅝ᶜᴿᴸꜰPₜ€–

MAINTENANCE EQUIPMENTS

Dowac Systems And Projects India Pvt Ltd.

“¾⅜⅝ᴸᴿ⅝ᴸᶠᴸᶠ¾ ◦¹₧ º¼£ º½ᴺᴸ® —ᴸᴿ¹ᴸᶠᴸᶠ£ ●⅓ᴸᴿⱽᴛᴺᴸ€–⅓®⅓ᴸᴿ£ ◦⅓®⅓ᴸᶠ⅝ᴺᴸᴺᴸ₨®⅓‰‰€
¤€–® ¤¹⅓⅜ ◦⅝⅓ᴸᴿ †⅝²⅔⅓‰ –€® –⅓ᴹᴰ⅓⅓ᴸᴿ£ –⅝–®⅓‰ⱽᴛᴸᴿⱽᴛ ¥ ²ⁿª ª¤¢£ ‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡©ª¿¥½¼¢ºⁿº¼¢ƒ½¼²º¢®²¼
○⅓₦¾ »¡¤º¿¥¡©ª¿¥½¼²º¼¢½¢
●¹²⅓€‰⅝ ƒ –⅝‰‰ ■®¹–⅝¾ »¡¤º¿¥¤¢¢©¢®²½ⁿªƒ¤¢¢¤©½²½ⁿª
ﬁ⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᴛ¾ƒƒ₩₩₩₧₩⅓ᴺᴸ⅝ᴸᴿᴺᴸᴿ⅝⅓ᴺᴸNº⅝–ᴺᴸᴴᴛ‰⅓–ᴺᴸᶠ€–⅜€⅓₧⅛¹Nº

Associated Pools

“¾⅜⅝ᴸᴿ⅝ᴸᶠᴸᶠ¾ ºⁿ£ ¤⅓ᴸᶠ®Nº€ †¹ⱽᴛᴸᶠ⅝£ ℞⅓®⅓⅜ ●⅓‰⅓£ –€–®⅓®⅓⅜ ¤¹⅓⅜£ ■ⱽᴛ–⅝ ¥ ¢ºº
ª¢º£ ‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡½ª¿¥½¢¼¤¼ª®ⁿ
○⅓₦¾ »¡¤º¿¥¡½ª¿¥ⁿª®ª½²¼ⁿ
●¹²⅓€‰⅝ ƒ –⅝‰‰ ■®¹–⅝¾ »¡¤º¿¥¤©½½º¼½¤¤®ƒ¤©²ª©½©¤¤®
ﬁ⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᴛ¾ƒƒ₩₩₩₧⅓ᴸᶠᴸᶠ¹⅛€⅓ᴺᴸ⅝⅜ᴴᴛ¹‰ᴸᶠ€–⅜€⅓₧⅛¹Nºƒᴸᶠ₩€NºNº€–®¥
ᴴᴛ¹‰ᴸᶠ₧®ᴺᴸNº‰

Capital Engineering Corporation

“¾⅜⅝ᴸᴿ⅝ᴸᶠᴸᶠ¾ “¥®£ “Nº⅔⅝₨ □⅓ᴸᴿ⅜⅝–£ –⅓Nº⅓₨ᴴᴛⱽᴛᴸᴿ ›₦ᴺᴸ⅝–ᴸᶠ€☢⅝ ‡–⅜ⱽᴛᴸᶠᴺᴸᴿ€⅓‰
“ᴸᴿ⅝⅓£ ℞€⅔⅓ᴸᶠᴴᴛⱽᴛᴸᴿ ¡‡–■ ■⅝ᴺᴸᴿ¹‰ ■ⱽᴛNºᴴᴛ¿£ ◦⅝₩ ‹⅝‰®€ ¥ ººª ª¼¼£ ‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡ºº¿¥²²®ª¼º²¼ƒ²²®ª¼º²¢ƒ½®©©º©½¢
○⅓₦¾ »¡¤º¿¥¡ºº¿¥½®©©º©½¼
ﬁ⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᴛ¾ƒƒ₩₩₩₧ᴸᶠᴴᴛ€–⅜‰⅝ᴸᶠ€–⅜€⅓₧⅛¹Nº

Bhagwansons

“¾⅜⅝ᴸᴿ⅝ᴸᶠᴸᶠ¾ □€‰‰ ¤¹⅓⅜ ■ᴴᴛᴴᴛ₧ ‡₧ff₧‡₧£ ℞ⱽᴛ⅜®€⅓–⅓ ¥ º¢º ªª¼£ ‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡ºⁿº¿¥½¢¤ª²¤¼ƒ½²ª¢¢º®
○⅓₦¾ »¡¤º¿¥¡ºⁿº¿¥½¢¤ª®ⁿº
ﬁ⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᴛ¾ƒƒ₩₩₩₧⅔®⅓®₩⅓–ᴸᶠ¹–ᴸᶠ₧⅛¹Nºƒ®ᴸᴿ€–⅜€–®¥Nº⅓⅛®€–⅝¥
⅛®®²₧®ᴺᴸNº‰

Goodluck Steel Tube Ltd

“¾⅜⅝ᴸᴿ⅝ᴸᶠᴸᶠ¾ ½¢£ “¾⅜€ᴺᴸ€¹–⅓‰ –€®⅓–€ □⅓ᴺᴸ⅝ –⅛®⅝Nº⅝£ –ⱽᴛ⅔ᴹᴰ€ ●⅓–⅜€
—¹ᴸᴿ–⅝ᴸᴿ£ □®⅓ᴹᴰ€⅓⅔⅓⅜ ¥ ½ªº ªªº£ ‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡º½ª¿¥½®¤ª®²¼ƒ½®¤ª©©¤ƒ½®¤ª®²¢ƒ½®¤ºª®®
○⅓₦¾ »¡¤º¿¥¡º½ª¿¥½®¤º¢½®
ﬁ⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᴛ¾ƒƒ₩₩₩₧®¹⅜‰ⱽᴛ⅛‰€–ᴺᴸ⅝ᴸᴿ–⅓ᴺᴸ€¹–⅓‰₧⅛¹Nº

Torque Master Tools Private Limited

“¾⅜⅝ᴸᴿ⅝ᴸᶠᴸᶠ¾ ¼½¼£ ‡–⅜ⱽᴛᴸᶠᴺᴸᴿ€⅓‰ “ᴸᴿ⅝⅓£ ■®⅓ᴸᶠ⅝¥º£ ■⅓–⅛®℅ⱽᴛ‰⅓ ¥ º¼¢ ºº¼£
‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡º®½¿¥½²ⁿ¤ª¤¢ƒ½²ⁿ¤ª¤ⁿ
○⅓₦¾ »¡¤º¿¥¡º®½¿¥²ªºº²½º
ﬁ⅝⅔ᴸᶠ€ᴺᴸ⅝¾ ®ᴺᴸᴺᴸᴴᴛ¾ƒƒ₩₩₩₧ᴺᴸ¹ᴸᴿᶠᶠⱽᴛ⅝Nº⅓ᴸᶠᴺᴸ⅝ᴸᴿ€–⅜€⅓₧⅛¹Nº

MISC. MATERIAL HANDLING EQUIP.

Weber Construction Equipment Pvt. Ltd.

“⅜⅜ᴸR⅝ᴸFᴸF¾ ™ ¥ ºⁿ£ □ᴸR¹ᵛT–⅜ ○‰¹¹ᴸR£ ○⅓–⅜⅓–⊛⅓– ff¹₩⅝ᴸR ¥ ¢£ ■ᴴTᴴT¹ᴸF€ᴺL⅝
“⅓®⅓– ■⅓ᴸRᴺL€ ■‰¹ᴺL£ ™1⅜®ᴴTᵛTᴸR ¤¹⅓⅜£ –⅓ᴺL⅝‰‰€ᴺL⅝£ “®Nº⅝⅜⅓⅔⅓⅜£
□ᵛT%⅓ᴸR⅓ᴺL ¥ ¼©ª ªº²£ ‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡®¤¿¥ⁿ²¢¢ª®ª
○⅓₦¾ »¡¤º¿¥¡®¤¿¥½½©®¢ª®ª
●¹⅔€‰⅝ ƒ –⅝‰‰ ■®¹–⅝¾ »¡¤º¿¥¤©½²ª½¢ª®ªƒ¤©®¤ªº¢ª®ª
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩₧⅛¹–ᴸFᴺLᴸRᵛT⅛ᴺL€¹–Nº⅓⅛®€–⅝€–⅜€⅓₧⅛¹Nº

Avity Agrotech & Industries

“⅜⅜ᴸR⅝ᴸFᴸF¾ ○¹₧ ¢¤ª ¥ ¢¤º£ — ¥ º£ –®⅓–⅜⅓– –¹NºᴴT‰⅝₦£ □€⅜⅛£
●⅓℅⅓ᴸRᴴTᵛTᴸR⅓£ ffl⅓⅜¹⅜⅛⅓ᴸR⅓ ¥ ¼¤ª ªºª£ ‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡½ⁿ²¿¥¼¤½¢¤½ⁿƒ¼¤½¢¤½®
○⅓₦¾ »¡¤º¿¥¡½ⁿ²¿¥½ⁿ¢¤º²º
●¹⅔€‰⅝ ƒ –⅝‰‰ ■®¹–⅝¾ »¡¤º¿¥¤¤½¢¼¤²²©©ƒ¤¤½²ª¤²²©©
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩₧⅓⊛€ᴺL₨⅓®ᴸR¹ᴺL⅝⅛®₧⅛¹Nºƒ⅓ᴸFᴴT€ᴸR⅓ᴺL¹ᴸRᴸF₧®ᴺLNº‰

Advance Equipment Co.

“⅜⅜ᴸR⅝ᴸFᴸF¾ ■‰¹ᴺL ○¹₧ “ ¼©ª£ ¤¹⅓⅜ ○¹₧ ½©£ fi⅓®‰⅝ ‡–⅜ᵛTᴸFᴺLᴸR€⅓‰ ›ᴸFᴺL⅓ᴺL⅝£
ff®⅓–⅝ ¥ ¢ªª ⁿª¢£ ‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡½½¿¥½²©½²ª½ª½
○⅓₦¾ »¡¤º¿¥¡½½¿¥½²¢ª½¤²¢
●¹⅔€‰⅝ ƒ –⅝‰‰ ■®¹–⅝¾ »¡¤º¿¥¤©½ªⁿ¤½½¼ª
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩₧⅓⅜⊛⅓–⅛⅝⅝ᶠFᵛT€ᴴTNº⅝–ᴺLᴸF₧⅛¹NºƒNº⅓ᴺL⅝ᴸR€⅓‰¥
®⅓–⅜‰€–®₧®ᴺLNº‰

Padmatech Engineering Systems

“⅜⅜ᴸR⅝ᴸFᴸF¾ ■‰¹ᴺL ○¹₧ ½º¤£ –⅝⅛ᴺL¹ᴸR ○¹₧ººª£ ■₧–₧○₧ff₧‹₧ “ –®¹ᴸF⅓ᴸR€£ ■ᵛT–⅝ ¥ ¢ºº
ª½ⁿ£ ‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡½ª¿¥¼ªⁿ©©²©¢
●¹⅔€‰⅝ ƒ –⅝‰‰ ■®¹–⅝¾ »¡¤º¿¥¤©½½²²½©©½ƒ¤©©ºªª¤ⁿ¼¤
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩₧ᴴT⅓⅜Nº⅓ᴺL⅝⅛®₧–⅝ᴺL

Impex Tools

“⅜⅜ᴸR⅝ᴸFᴸF¾ ¢º²ƒº⅔£ ℠⅓ᴸF⅓ᴸR₩⅓⅜€£ ●⅓–€Nº⅓–®⅓‰ –¹⅛€⅝ᴺL₨ –ᵛT€‰⅜€–® –£
■⅞⅞€⅛⅝ ○¹₧ ½₧ ●ᵛTNº⅔⅓€ ■ᵛT–⅝ ¤¹⅓⅜£ ■ᵛT–⅝ ¥ ¢ºº ª¼¢£ ●⅓®⅓ᴸR⅓ᴸF®ᴺLᴸR⅓£
‡–⅜€⅓
■®¹–⅝¾ »¡¤º¿¥¡½ª¿¥½®º¢®½©º
○⅓₦¾ »¡¤º¿¥¡½ª¿¥½ⁿ¢¢²®ⁿ½
●¹⅔€‰⅝ ƒ –⅝‰‰ ■®¹–⅝¾ »¡¤º¿¥¤¼®ºªⁿⁿⁿººƒ¤©ⁿªº¢®¤©¤
fi⅝⅔ᴸF€ᴺL⅝¾ ®ᴺLᴺLᴴT¾ƒƒ₩₩₩₧€NºᴴT⅝₦ᴺL¹¹‰ᴸF€–

LABORATORY EQUIPMENT

SGM Lab Solutions

●ᴸꟳPₜ –℗€❂⅓–℗€ □ⱽᵀᴴᵀᴺᴸ⅓
“⅜⅜ᶜᴿ⅝ᴸꟳᴸꟳ¾ –“¥ ºº£ ●⅓–℗¹‰ᴴᵀⱽᵀᶜᴿ€ ‡–⅜ⱽᵀᴸꟳᴺᴸᶜᴿ€⅓‰ “ᶜᴿ⅝⅓£ ▪℗⅓ᴸꟳ⅝¥ ½£ ○⅝₩
‹⅝‰℗€ ¥ ººª ª¼¢£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿¥¤®ºº¹¼©℗℗ªª
ff⅝‰⅝ᴴᵀ℗¹–⅝¾ »¡¤º¿¥¡ºº¿¥¢©¢©ºº¢ºº¢ƒ ¢©¢©ºº¢º²
›¥Nº¹⅓€‰¾ ᴸꟳ℗€❂⅓–℗€”‰⅓⅔¼ⁿªPₜ⅛¹Pₜ€–
fi⅝⅔ᴸꟳ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜ‰⅓⅔¹ᶜᴿ⅓ᴺᴸ¹ᶜᴿRs¥⅝ᶠᴿⱽᵀ€ᴴᵀNº⅝–ᴺᴸᴸꟳPₜ€–

Indeecon Equipments & Instrument Company

●ᶜᴿPₜ “℅⅓Rs ●⅓–⅝ ¡▪ᶜᴿ¹ᴴᵀᶜᴿ€⅝ᴺᴸ¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸꟳᴸꟳ¾ —Pₜ›PₜoPₜ ○¹Pₜ º½ºº ºª£ –℗⅓ᶜᴿ⅓ᴺᴸ ●⅓ᴺᴸ⅓ –⅝❂⅓ –¹¹⅛€⅝ᴺᴸRs£ ¤ª ○⅝⅝ᴺᴸ
▫¹¹⅓⅜£ ˢᴹPₜ‹Pₜ —¹Nºᴴᵀ¹ⱽᵀ–⅜£ □⅓–⅜℗€ ○⅓℗⅓ᶜᴿ£ —℗⅓ᶜᴿ℅u¹ᴴᵀ£ ˢᴹ⅓–⅜€❂⅓‰€
¡fi¿●ⱽᵀNº²⅓⅓€ ¥ ¢ªªⁿ℗£ ●⅓℗⅓ᶜᴿ⅓ᴸꟳ℗ᴺᴸᶜᴿ⅓£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿¥¤©½ª¢ºº®¤º¢£ »¡¤º¿¥¤©¤¼¼¼º½¼¤
ff⅝‰⅝ᴴᵀ℗¹–⅝¾ »¡¤º¿¥¡½½¿¥¼½²º¼¤ª²
fi⅝⅔ᴸꟳ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜ€–⅜⅝⅝⅛¹–Pₜ€–

Rands Instruments Company

“⅜⅜ᶜᴿ⅝ᴸꟳᴸꟳ¾ —¥½¢£ —‡■ —¹Nºᴴᵀ‰⅝₦£ ffl⅓–⅓℗⅓ᶜᴿ⅓Nº ▫¹¹⅓⅜£ “ᴺᴸ℗€ᴴᵀ⅝⅝ᴺᴸ£
“Nº²⅓⅓ᴺᴸᴺᴸⱽᵀᶜᴿ£ ‡–⅜ⱽᵀᴸꟳᴺᴸᶜᴿ€⅓‰ ›ᴸꟳᴺᴸ⅓ᴺᴸ⅝
—℗⅝––⅓€ ¥ ⁿªªª²©£ ff⅓Nº€‰ ○⅓⅜ⱽᵀ£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿¥¤©¢ª²²ªⁿ¤¤£
ff⅝‰⅝ᴴᵀ℗¹–⅝¾ »¡¤º¿¥¡¢¢¿¥½ⁿ²¼º¢¤½£ »¡¤º¿¥¡¢¢¿¥¼½²²ªª©½
›Nº¹⅓€‰¾ ᶜᴿ⅓–⅜ᴸꟳ€–ᴸꟳᴺᴸᶜᴿⱽᵀNº⅝–ᴺᴸᴸꟳ”℗Nº¹⅓€‰Pₜ⅛¹Nº
fi⅝⅔ᴸꟳ€ᴺᴸ⅝¾
℗ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩Pₜ‰⅓⅔¹ᶜᴿ⅓ᴺᴸ¹ᶜᴿRs⅝ᶠᴿⱽᵀ€ᴴᵀNº⅝–ᴺᴸNº¹⅓–ⱽᵀ⅞⅓⅛ᴺᴸⱽᵀᶜᴿ⅝ᶜᴿRₜ⅛¹Nº

Mech Lab Equipments India Pvt Ltd.

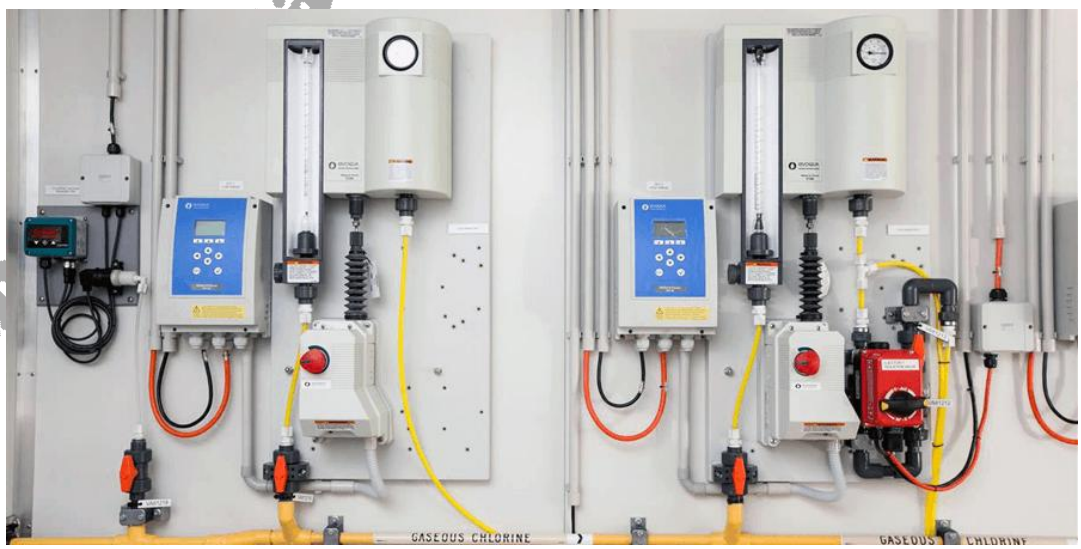
●ᶜᴿPₜ “–⅓–⅜⅛⅓ –ⱽᵀ⅔ᶜᴿ⅓Nº¹⅓–€⅓– ¡‹€ᶜᴿ⅝⅛⅝ᴺᴸ¹ᶜᴿ¿
“⅜⅜ᶜᴿ⅝ᴸꟳᴸꟳ¾ ○¹Pₜ ºª¼ƒ½£ –ⱽᵀ⅔⅔⅓–⅓€⅛℅u⅝– ▪ⱽᵀ⅜⅝℗ⱽᵀᶜᴿ ▫¹¹⅓⅜£ –⅓⅛℅u –€⅜⅝⅝ ¹⁷⁄₈
ˢᴹ⅓ᶜᴿⱽᵀᴴᵀᴴᵀ⅓–⅓ᶜᴿ⅓Rs⅓– ˢᴹ⅓€‰£ —℗€––⅓❂⅝⅜⅛⅓Nºᴴᵀ⅓ᴺᴸᴺᴸ€ ▪Pₜ ■Pₜ —¹€Nº²⅓⅓ᴺᴸ¹ᶜᴿ⅝ ¥
ⁿ¢ºª¢¤£ ff⅓Nº€‰ ○⅓⅜ⱽᵀ£ ‡–⅜€⅓
●¹²⅔€‰⅝¾ »¡¤º¿¥¤¢¢¼℗¼ⁿ℗¢¼£ »¡¤º¿¥¤¢¢¼¼½²¹½²¹¼¼
ff⅝‰⅝ᴴᵀ℗¹–⅝¾ »¡¤º¿¥¡¢½½¿¥½¤½¤ª¢½
›Nº¹⅓€‰¾ €–⅞¹”Nº⅝⅛⅝℗‰⅓⅔⅗⅝ᶠᴿⱽᵀ€ᴴᵀNº⅝–ᴺᴸᴸꟳPₜ€–£
›Nº¹⅓€‰¾ Nº⅝⅛⅝℗‰⅓⅔Pₜ⅛⅔⅗⅝”℗Nº¹⅓€‰Pₜ⅛¹Nº
fi⅝⅔ᴸꟳ€ᴺᴸ⅝¾ ℗ᴺᴸᴺᴴᵀ¾ƒƒ₩₩₩PₜNº⅝⅛⅝℗‰⅓⅔⅗⅝ᶠᴿⱽᵀ€ᴴᵀNº⅝–ᴺᴸᴸꟳPₜ€–

Machinery & Product Photographs

Machinery Photographs

Evaporator

Chlorinator



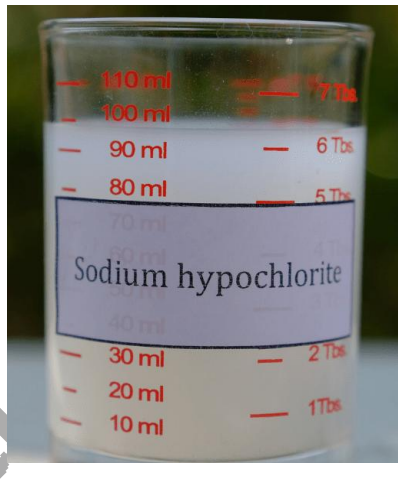
Caustic Preparation Tank

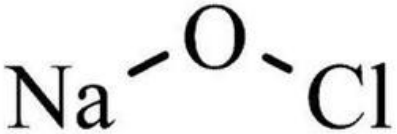
Storage Tank

Control Panel

Blower + Ss Cyclone

Product Photographs





PROJECT FINANCIALS

Sodium Hypochlorite

Annexure 1

Assumptions made

1	Interest cost for CC limit (WC finance) is @10.00%
2	Semi Variable & Fixed Expenses are done on 40:60 basis on full capacity utilisation in 5th Year of operation.
3	For working capital calculation, the WC cycle is considered by taking following assumptions are made:
a	Stock on hand i.e. Raw material cost @ 1 month, Finished goods @ 1 months and WIP cost taken for 1 days.
b	Receivables @0 months.
c	Current liabilities @ 1 months.
4	Currency is (Amount in ₹) and (₹ in lacs) in some tables

Sodium Hypochlorite

Annexure 2

0

PLANT ECONOMICS **Sodium Hypochlorite**

Rated Plant Capacity			
Total Production per Day	=		MT/Day
Total Production per Month	=		MT/Month
Total Production per Annum	=		MT/Annum
Basis			
No. of Working Days	=		Days/Month
	=		Days/Annum
No. of Shifts	=		Shifts Per Day
One Shift	=		Hours
Total Working Hours Per Day			Hours Per Day

Sodium Hypochlorite

Annexure 3

0

PRODUCTION SCHEDULE

Name of Product	MT Per Day	MT Per Annum	Total Batch	UOM
Sodium Hypochlorite				MT

Sodium Hypochlorite

Annexure 4

0

LAND & BUILDING (Amount in ₹)

Particulars of proposed Assets (UOM)	UOM	Quantity	Rate	Total
Land Area Required	sq.mts.			
Factory Building -				
Production Shed	sq.mts.			
Raw Material Storage	sq.mts.			
Finished Product Store	sq.mts.			
Electrical & D.G. Set Room	sq.mts.			
Maintenance Room	sq.mts.			
Administrative Block	sq.mts.			
Laboratory	sq.mts.			
Toilets	sq.mts.			
Security Room	sq.mts.			

Sodium Hypochlorite

Annexure 4

LAND & BUILDING (Amount in ₹)

Particulars of proposed Assets (UOM)	UOM	Quantity	Rate	Total
Land Development Cost, Boundary Wall, Gate & Road etc.				
			TOTAL	

Sodium Hypochlorite

Annexure 5

0

PLANT & MACHINERY (Amount in ₹)

Particulars of Assets Proposed (UOM)	UOM	Quantity	Rate	Total
Indigenous Machineries				
Sodium Hypochlorite Generator with Chlorinator System Cap. 15 MT per Day	Sets			
Chlorine Generator and its Acceessories with auto Cut/Shut Off Valve	Sets			
Chlorine Evaporator and Its Accessories	Sets			
Possitive Feed Chlorinator - Manual Rotameter and Flow Control	Sets			
Recirculation Pump/Discharge Pump @ Preparation Tank	Sets			
Pipes & Fittings	Lot			
Valves and Accessories	Sets			
Instruments and Accessories	Sets			
Skid Mounted Arragement	Sets			
Emergency Kit B	Nos.			
Local Control Panel	Unit			
Blower	Sets			
Preparation Tank (5000 Ltrs.)	Nos.			
Storage Tank (20 MT)	Nos.			
Storage Tank (10 MT)	Nos.			

Sodium Hypochlorite

Annexure 5

PLANT & MACHINERY (Amount in ₹)

Particulars of Assets Proposed (UOM)	UOM	Quantity	Rate	Total
Maintenance Equipments				
Erection & Installation				
Miscellaneous Material Handling Equipments				
Laboratory Equipments				
			TOTAL	

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

Annexure 6

0

OTHER FIXED ASSETS (Amount in ₹)

Particulars of Assets Proposed	Quantity	Rate	Amount
Furniture & Fixtures			
Office Equipment, Furniture plus Other Equipment & Accessories			
Pre-operative & Preliminary Expenses			
Electrical Installation 25 KVA			
Electrical Cable, MCB, Meter Boxes, Switch Board etc.			
Fire Fighting Equipment			
D.G. Set 20 KVA			
Water Resources with Storage Tank			
Website Development & Promotion			
Others			
Technical know how			
Office Vehicles			
Office Automation Equipments (Telephone/ Fax/ Computer)			
Provision for Contingencies			
		TOTAL	

Sodium Hypochlorite

Annexure 7

0

WORKING CAPITAL Requirement Per Month

Raw Materials	UOM	Quantity	Rate	Amount	Qty p.a.	Qty per Batch
Caustic Soda	MT					
Chlorine Liquid	MT					
Printed HDPE Rocket Carboys (50 Ltrs.)	Nos					
Lab & Other Chemicals Cost						
Consumable Store						
			TOTAL			

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

Annexure 8

0

Overheads required per month (Amount in ₹)

Utilities and Overheads	Quantity	Rate	Amount
Power Consumption			
Water Consumption			
Fuel Cost			
Insurance Professional Fees			
Administration Expense			
Stationery Exp., Telephone, Postage			
Repairs and Maintanance			
Internet Expenses			
Conveyance Exp.			
Publicity Exp.			
		TOTAL	

Total load is **20** **Kwatts**

Utilities and Overheads	Quantity	Rate	Amount
Royalty and other Charges			
Selling and Distribution Expenses			
		TOTAL	

Sodium Hypochlorite

Annexure 9

0

Salary and Wages (Amount in ₹)

Salary and Wages	UOM	Quantity	Rate	Amount
Manager	Nos.			
Chemical Engineer	Nos.			
Laboratory Chemist	Nos.			
Supervisors	Nos.			
Skilled Workers	Nos.			
Electrician cum Fitter	Nos.			
Unskilled Workers	Nos.			
Accountant	Nos.			
Computer Operators	Nos.			
Office Staffs	Nos.			
Sales Executives	Nos.			
Store Keeper	Nos.			
Peons	Nos.			
Security Guards	Nos.			
TOTAL BASIC SALARY				
Plus Perks (20 % p.a. of Basis Salaries)				
Per Month			**TOTAL**	
Per Annum				

Sodium Hypochlorite

Annexure 10

0

TURNOVER PER ANNUM (Amount in ₹)

Name of Product	UOM	Quantity	Rate	Amount
Sodium Hypochlorite	MT			
			TOTAL	

Sodium Hypochlorite

0

Annexure 11

SHARE CAPITAL (₹ in lacs)

Share Capital (No. of Shares)	Face Value ₹/ Share	Equity Share Capital		
534850				
Particulars	**Existing**	**Existing**	**Proposed**	**Proposed**
	%age		**%age**	
Equity Capital				
Preference Share Capital				
Total				

Sodium Hypochlorite

0

ANNEXURE - 1

COST OF PROJECT AND MEANS OF FINANCE (₹ in lacs)

Particulars	Existing	Proposed	Total
C O S T O F P R O J E C T			
Land & Site Development Exp.			
Land Area Required			
Land Development Cost, Boundary Wall, Gate & Road etc.			
Buildings			
Factory Building -			
Office Buildings			
Plant & Machineries			
Indigenous Machineries			
Erection & Installation			
Laboratory Equipments			
Miscellaneous Material Handling Equipments			
Imported Machineries			
Technical know how			
Office Vehicles			
Office Automation Equipments (Telephone/ Fax/ Computer)			
Office Equipment, Furniture plus Other Equipment & Accessories			
Other Misc. Assets			
Pre-operative & Preliminary Expenses			
Provision for Contingencies			
Total Capital Cost of Project			
Margin Money for Working Capital			
Total Cost of Project			
M E A N S O F F I N A N C E			
Equity Share Capital			
Others - Preference Share Capital			
Total Equity Share Capital			
Long/Medium Term Borrowings			
FROM BANK			
From Other Financial Institutions			
Total Long/Medium Term Borrowings			
Total Means of Finance			

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

ANNEXURE - 2 0.00

PROFITABILITY AND NET CASH ACCRUALS

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Revenue/Income/Realisation					
Gross Sales Realisation					
Less : Excise Duties/Levies					
Net Sales Realisation					
Total Revenue/Income/Realisation					
Expenses/Cost of Products/Services/Items					
Raw Material Cost					
Indigenous					
Total Nett Consumption					
Lab & ETP Chemical Cost					
Packing Material Cost					
Sub Total of Net Consumption					
Miscellaneous Cost					
Employees Expenses					
Fuel Expenses					
Power/Electricity Expenses					
Depreciation					
Royalty & Other Charges					
Repairs & Maintenance Exp.					
Other Mfg. Expenses					
Cost of Output of Goods Sold					

Sodium Hypochlorite

ANNEXURE - 2 0.00

PROFITABILITY AND NET CASH ACCRUALS

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Gross Profit					
Administration Expenses					
Technical Knowhow Fees & Exp.					
Financial Charges					
Long/Medium Term Borrowing					
On Wkg. Capital Borrowings					
Total Financial Charges					
Selling Expenses					
Total Cost of Sales					
Net Profit Before Taxes					
Tax on Profit					
Net Profit After Taxes					
Depreciation Added Back					
Technical Knowhow Fees & Exp.					
Net Cash Accruals					

Sodium Hypochlorite

0

ANNEXURE - 3

ASSSESSEMENT OF WORKING CAPITAL REQUIREMENTS (₹ in lacs)

Particulars	Stk.Prd.	Stk.Prd.		Operating Years				
	1st Year	2nd Yr&+		1-2	2-3	3-4	4-5	5-6
Capacity	Months	Months	%					
CURRENT ASSETS								
Stocks on Hand								
Raw Material Cost								
Indigenous			M					
Lab & ETP Chemical			M					
Packing Material			M					
Consumable Store			M					
Work-in-Process			D					
Finished Goods			M					
Current Expenses			M					
Receivables			M					
Total								
Cash/Bank Balances								
Gross Wkg. Capital								

Sodium Hypochlorite

ANNEXURE - 3 0.00

ASSSESSEMENT OF WORKING CAPITAL REQUIREMENTS (₹ in lacs)

Particulars	Stk.Prd.	Stk.Prd.		Operating Years				
	1st Year	2nd Yr&+		1-2	2-3	3-4	4-5	5-6
Capacity	Months	Months	%					
CURRENT LIABILITIES								
Sundry Creditors - Raw Material Cost								
Indigenous			M					
Lab & ETP Chemical			M					
Packing Material			M					
Miscellaneous Cost			M					
Current Expenses			M					
Other Current Liabilities			M					
Total								
Instalments Due Within Next 12 Months: Term Borrowings								
Total Current Liabilities								
Net Wkg.Capital(Tot.CA - Tot.CL)								
M.P.B.F. -Method I								
As Per Tandon Com.Norm-Method II - Permissible Finance - D.P.(%age)								
Work in Process %	0.65	DP						
Finished Goods %	0.70	DP						
Total Bank Finance(DP Method)								
Bank Finance(Turnover Method)								
Bank Finance : As per DP Method								
Margin Money : (At Commencement)								
Margin Money:(incl.Cash/Bk. Bal)								
% Margin Money - Net Wkg.Capital								
Current Ratio (No. of times)								

Sodium Hypochlorite

0.00

ANNEXURE - 3

Working note for calculation of Work-in-process

Description of Product	% assumed for WIP Completion	Rate per unit in ₹	Equivalent (%) Rate per unit in ₹
Caustic Soda			
Chlorine Liquid			

Sodium Hypochlorite

ANNEXURE - 3 -

Working note for calculation of Work-in-process

Description of Product	% assumed for WIP Completion	Rate per unit in ₹	Equivalent (%) Rate per unit in ₹
Printed HDPE Rocket Carboys (50 Ltrs.)			
Lab & Other Chemicals Cost			
Consumable Store			
Total			

Sodium Hypochlorite

ANNEXURE - 4 0.00

SOURCES AND DISPOSITION OF FUNDS (₹ in lacs)

Particulars	Constr.	Operating Years				
	Period	1-2	2-3	3-4	4-5	5-6
SOURCES OF FUNDS						
Net Profit Before Tax with Interest Charges Added Back but after Depreciation Provision						
Equity Share Capital						
Depreciation						
Incr.in Long/Medium Term Proposed-FROM BANK						
Incr.in Bank Borrowing for Working Capital						
Incr.in Cur.Liabilities						
Technical Knowhow Fees & Exp.						
Total Sources of Fund						
DISPOSITIONS OF FUNDS						
P & P Expenses						
Technical Knowhow Fees						
Incr.in Capital Expense						
Incr.in Current Assets						
Decr.in Long/Medium Term Proposed-FROM BANK						
Interest/Financial Exp.						
Taxes on Profit						
Total Disposition						
Opening Balance						
Net Surplus / Deficit						
Closing Balance						

Sodium Hypochlorite

ANNEXURE - 5 0.00

PROJECTED BALANCE SHEETS

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Equity Share Capital					
Surplus of Previous Year					
Add : Net Profit After Taxes					
Surplus at the End of Year					
Unsecured Deposits					
Long/Medium Term Borrowings Proposed-FROM BANK					
Bank Borrowing for Wkg. Capital					
Current Liabilities					
Sundry Creditors					
Other Current Liabilities					
Total Current Liabilities					
Total of Liabilities					

Sodium Hypochlorite

ANNEXURE - 5 0.00

PROJECTED BALANCE SHEETS

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
A S S E T S					
Fixed Assets					
Gross Block					
Less : Depreciation to Date					
Net Block					
Current Assets					
Stocks on Hand					
Receivables					
Other Current Assets					
Cash and Bank Balances					
Total Current Assets					
P & P Exp. and/or Other Dvp.Exp.					
(To The Extent Not W/Off)					
Other Non Current Assets					
Total of Assets					
ROI (Average of Fixed Assets)					
RONW (Average of Share Capital)					
ROI (Average of Total Assets)					

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

ANNEXURE - 6 0.00

PROFITABILITY RATIOS, DSCR, DEBT EQUITY, ETC.

(₹ in lacs)

Particulars		Operating Years				
		1-2	2-3	3-4	4-5	5-6
Profit Percentages to Net Sales						
Gross Profit						
% Of G.P. to Net Sales						
Net Profit Before Taxes						
% of N.P.B.T. To Net Sales						
Net Profit After Taxes						
% of N.P.A.T. To Net Sales						
Debt Service Coverage Ratio						
Funds Available to Service Debts						
Net Profit After Taxes						
Depreciation Charges						
Technical Knowhow Fees & Exp						
Interest on Long/Medium Term						
T o t a l						
Debt Service Obligations						
Repayment of Long/Medium Term						
Interest on Long/Medium Term						
T o t a l						
D. S. C. R. (Individual)						
D. S. C. R. (Cumulative)						
D. S. C. R. (Overall)						
Parameters						
Initial Equity Capital						
Credit Balance in P & L						
Total Capital excl Unsec Deposits						
Unsecured Dep.						
Total Equity incl Unsecured Deposits						

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

ANNEXURE - 6 0.00

PROFITABILITY RATIOS, DSCR, DEBT EQUITY, ETC.

(₹ in lacs)

Particulars		Operating Years				
		1-2	2-3	3-4	4-5	5-6
Long/Medium Term Borrowings from Bank						
Term lia. Incl Unsecured Deposit						
Total Liabilities						
Total Liabilities incl Unsecured Deposits						
DEBT EQUITY RATIO considering						
i.e.Total Term Lia./NW						
Unsecured Dep. as Equity						
Unsecured Dep. as Debt						
Total Outside Lia./NW						
Assets Turnover Ratio (x)						
No. of Shares of 10.00 each						
Earnings Per Share (EPS) (in ₹)						
Proposed divident						
Cash EPS (in ₹)						
Dividend Per Share(DPS) (in ₹)						
Payout Ratio (%Age)						
Retained Earnings/Share (in ₹)						
Retained Earnings (%Age)						
Book Value Per Share (in ₹)						
Debt Per Share (in ₹)						
Probable Mkt.Price/Share(in ₹)						
Price / Book Value (x)						
Price Earnings Ratio (x)						
Yield (%Age)						

Sodium Hypochlorite

ANNEXURE - 7 0.00

BREAK EVEN ANALYSIS

(₹ in lacs)

Particulars		Operating Years				
	Ratio	1-2	2-3	3-4	4-5	5-6
BREAK EVEN ANALYSIS						
Total Value of Output						
Variable Cost & Expenses						
Raw Material Cost						
Lab & ETP Chemical Cost						
Packing Material Cost						
Sales Commission/Exp.						
Sub-total						
Less:W.I.P. Adjustments						
Total Variable Cost						
Net Contribution						
Profit Volume Ratio (%)						
Semi-Var./Semi-Fixed Exp.						
Miscellaneous Cost						
Employees Expenses						
Power/Electricity Expen						
Fuel Expenses						
Royalty & Other Charges						

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

ANNEXURE - 7 0.00

BREAK EVEN ANALYSIS

(₹ in lacs)

Particulars		Operating Years				
	Ratio	1-2	2-3	3-4	4-5	5-6
Repairs & Maintenance E						
Other Mfg. Expenses						
Administration Expenses						
Selling Expenses						
Interest on Wkg.Capital						
Tot.Semi-Var./Fixed Exp.						
Fixed Expenses / Cost						
Miscellaneous Cost						
Employees Expenses						
Power/Electricity Expen						
Fuel Expenses						
Royalty & Other Charges						
Repairs & Maintenance E						
Other Mfg. Expenses						
Administration Expenses						
Selling Expenses						
Intrest-Fixed Borrowing						
Intrest-Working Capital						
Depreciation Charges	100.00	15.35	13.31	11.55	10.04	8.73

Sodium Hypochlorite

ANNEXURE - 7 0.00

BREAK EVEN ANALYSIS

(₹ in lacs)

Particulars		Operating Years				
	Ratio	1-2	2-3	3-4	4-5	5-6
Deferred Expenses W/Off	100.00	0.80	0.80	0.80	0.80	0.80
Total Fixed Expenses		159.15	153.90	148.93	144.21	139.69
Tot.Fixed/Semi-Fixed Exp		175.55	185.82	197.25	210.30	225.13
Tot.Cash Fixed/SemiFixed		159.40	171.71	184.89	199.47	215.60
Cash Break Even Sales		599.17	653.38	703.73	759.34	820.88
Cash Margin of Safety		259.43	348.32	441.07	528.56	610.12
Break Even Sales		659.88	707.08	750.75	800.60	857.18
Margin of safety		198.72	294.62	394.05	487.30	573.82
At Maximum Utilisation :	Year	1.00	2.00	3.00	4.00	5.00
(as % of Installed Capacity)						
Cash B.E.P. :	%	69.78%	65.23%	61.47%	58.96%	57.36%
B.E.P. :	%	76.86%	70.59%	65.58%	62.16%	59.90%

Sodium Hypochlorite

ANNEXURE - 8 0.00

SENSITIVITY ANALYSIS - I

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
INCREASE IN SALES PRICES ::: By 2.00 %					
Resultant - Sale Value(Sales)					
Resultant - Gross Profit					
Resultant - N.P.B.T.					
Resultant - Tax on Profit					
Resultant - N.P.A.T.					
Resultant - Funds available					
As such - Debt Obligations					
Resultant - DSCR (Individual)					
Resultant - DSCR (cumulative)					
Resultant - DSCR (overall)					
Resultant - Sale Value(Output)					
As such - Variable Cost					
Resultant - Nett Contribution					
Resultant - PV Ratio (%age)					
Resultant - Cash BEP Sales					
Resultant - Cash Margin of Safety					
Resultant - BEP Sales					
Resultant - Margin of safety					
Resultant - Cash BEP % (Yr. 5)					

Sodium Hypochlorite

ANNEXURE - 8 0.00

SENSITIVITY ANALYSIS - I

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Resultant - BEP %age (Yr. 5)					
Resultant - DEBT EQUITY RATIO					
- Unsecured Dep. as Equity					
- Unsecured Dep. as Debt					
Resultant - ROI (%age) (Based on Fixed Assets)					
Resultant - RONW (%age)					
DECREASE IN SALES PRICES ::: By 2.00 %					
Resultant - Sale Value(Sales)					
Resultant - Gross Profit					
Resultant - N.P.B.T.					
Resultant - Tax on Profit					
Resultant - N.P.A.T.					
Resultant - Funds available					
As such - Debt Obligations					
Resultant - DSCR (Individual)					
Resultant - DSCR (cumulative)					
Resultant - DSCR (overall)					

Sodium Hypochlorite

ANNEXURE - 8 0.00

SENSITIVITY ANALYSIS - I

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Resultant - Sale Value(Output)					
As such - Variable Cost					
Resultant - Nett Contribution					
Resultant - PV Ratio (%age)					
Resultant - Cash BEP Sales					
Resultant - BEP Sales					
Resultant - Cash Margin of Safety					
Resultant - Margin of safety					
Resultant - Cash BEP % (Yr. 5)					
Resultant - BEP %age (Yr. 5)					
Resultant - DEBT EQUITY RATIO					
- Unsecured Dep. as Equity					
- Unsecured Dep. as Debt					
Resultant - ROI (%age)					
Resultant - RONW (%age)					

Sodium Hypochlorite

ANNEXURE - 9 0.00

SENSITIVITY ANALYSIS - II

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
INCREASE IN SALES PRICES ::: By 5.00 %					
Resultant - Sale Value(Sales)					
Resultant - Gross Profit					
Resultant - N.P.B.T.					
Resultant - Tax on Profit					
Resultant - N.P.A.T.					
Resultant - Funds available					
As such - Debt Obligations					
Resultant - DSCR (Individual)					
Resultant - DSCR (cumulative)					
Resultant - DSCR (overall)					
Resultant - Sale Value(Output)					
As such - Variable Cost					
Resultant - Nett Contribution					
Resultant - PV Ratio (%age)					
Resultant - Cash BEP Sales					
Resultant - BEP Sales					
Resultant - Cash Margin of Safety					
Resultant - Margin of safety					
Resultant - Cash BEP % (Yr. 5)					

Sodium Hypochlorite

ANNEXURE - 9 0.00

SENSITIVITY ANALYSIS - II

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Resultant - BEP %age (Yr. 5)					
Resultant - DEBT EQUITY RATIO					
- Unsecured Dep. as Equity					
- Unsecured Dep. as Debt					
Resultant - ROI (%age)					
Resultant - RONW (%age)					
DECREASE IN SALES PRICES ::: By 5.00 %					
Resultant - Sale Value(Sales)					
Resultant - Gross Profit					
Resultant - N.P.B.T.					
Resultant - Tax on Profit					
Resultant - N.P.A.T.					
Resultant - Funds available					
As such - Debt Obligations					
Resultant - DSCR (Individual)					
Resultant - DSCR (cumulative)					
Resultant - DSCR (overall)					

Sodium Hypochlorite

ANNEXURE - 9 0.00

SENSITIVITY ANALYSIS - II

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Resultant - Sale Value(Output)					
As such - Variable Cost					
Resultant - Nett Contribution					
Resultant - PV Ratio (%age)					
Resultant - Cash BEP Sales					
Resultant - BEP Sales					
Resultant - Cash Margin of Safety					
Resultant - Margin of safety					
Resultant - Cash BEP % (Yr. 5)					
Resultant - BEP %age (Yr. 5)					
Resultant - DEBT EQUITY RATIO					
- Unsecured Dep. as Equity					
- Unsecured Dep. as Debt					
Resultant - ROI (%age)					
Resultant - RONW (%age)					

Sodium Hypochlorite

ANNEXURE - 10 0.00

SENSITIVITY ANALYSIS - III

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
INCREASE IN MAIN MATERIAL PRICES ::: By 2.00 %					
Resultant - Main Material Amt					
Resultant - Gross Profit					
Resultant - N.P.B.T.					
Resultant - Tax on Profit					
Resultant - N.P.A.T.					
Resultant - Funds available					
As such - Debt Obligations					
Resultant - DSCR (Individual)					
Resultant - DSCR (cumulative)					
Resultant - DSCR (overall)					
As such - Sale Value(Output)					
Resultant - Variable Cost					
Resultant - Nett Contribution					
Resultant - PV Ratio (%age)					
Resultant - Cash BEP Sales					
Resultant - BEP Sales					
Resultant - Cash Margin of Safety					

Sodium Hypochlorite

ANNEXURE - 10 0.00

SENSITIVITY ANALYSIS - III

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Resultant - Margin of safety					
Resultant - Cash BEP % (Yr. 5)					
Resultant - BEP %age (Yr. 5)					
Resultant - DEBT EQUITY RATIO					
- Unsecured Dep. as Equity					
- Unsecured Dep. as Debt					
Resultant - ROI (%age)					
Resultant - RONW (%age)					
DECREASE IN MAIN MATERIAL PRICES ::: By 2.00 %					
Resultant - Main Material Amt					
Resultant - Gross Profit					
Resultant - N.P.B.T.					
Resultant - Tax on Profit					
Resultant - N.P.A.T.					
Resultant - Funds available					
As such - Debt Obligations					
Resultant - DSCR (Individual)					

Sodium Hypochlorite

ANNEXURE - 10 0.00

SENSITIVITY ANALYSIS - III

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Resultant - DSCR (cumulative)					
Resultant - DSCR (overall)					
As such - Sale Value(Output)					
Resultant - Variable Cost					
Resultant - Nett Contribution					
Resultant - PV Ratio (%age)					
Resultant - Cash BEP Sales					
Resultant - BEP Sales					
Resultant - Cash Margin of Safety					
Resultant - Margin of safety					
Resultant - Cash BEP % (Yr. 5)					
Resultant - BEP %age (Yr. 5)					
Resultant - DEBT EQUITY RATIO					
- Unsecured Dep. as Equity					
- Unsecured Dep. as Debt					
Resultant - ROI (%age)					
Resultant - RONW (%age)					

Sodium Hypochlorite

ANNEXURE - 11 0.00

SENSITIVITY ANALYSIS - IV

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
INCREASE IN MAIN MATERIAL PRICES ::: By 5.00 %					
Resultant - Main Material Amt					
Resultant - Gross Profit					
Resultant - N.P.B.T.					
Resultant - Tax on Profit					
Resultant - N.P.A.T.					
Resultant - Funds available					
As such - Debt Obligations					
Resultant - DSCR (Individual)					
Resultant - DSCR (cumulative)					
Resultant - DSCR (overall)					
As such - Sale Value(Output)					
Resultant - Variable Cost					
Resultant - Nett Contribution					
Resultant - PV Ratio (%age)					
Resultant - Cash BEP Sales					
Resultant - BEP Sales					

Sodium Hypochlorite

ANNEXURE - 11 0.00

SENSITIVITY ANALYSIS - IV

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Resultant - Cash Margin of Safety					
Resultant - Margin of safety					
Resultant - Cash BEP % (Yr. 5)					
Resultant - BEP %age (Yr. 5)					
Resultant - DEBT EQUITY RATIO					
- Unsecured Dep. as Equity					
- Unsecured Dep. as Debt					
Resultant - ROI (%age)					
Resultant - RONW (%age)					
DECREASE IN MAIN MATERIAL PRICES ::: By 5.00 %					
Resultant - Main Material Amt					
Resultant - Gross Profit					
Resultant - N.P.B.T.					
Resultant - Tax on Profit					
Resultant - N.P.A.T.					
Resultant - Funds available					
As such - Debt Obligations					

Sodium Hypochlorite

ANNEXURE - 11 0.00

SENSITIVITY ANALYSIS - IV

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Resultant - DSCR (Individual)					
Resultant - DSCR (cumulative)					
Resultant - DSCR (overall)					
As such - Sale Value(Output)					
Resultant - Variable Cost					
Resultant - Nett Contribution					
Resultant - PV Ratio (%age)					
Resultant - Cash BEP Sales					
Resultant - BEP Sales					
Resultant - Cash Margin of Safety					
Resultant - Margin of safety					
Resultant - Cash BEP % (Yr. 5)					
Resultant - BEP %age (Yr. 5)					
Resultant - DEBT EQUITY RATIO					
- Unsecured Dep. as Equity					
- Unsecured Dep. as Debt					
Resultant - ROI (%age)					
Resultant - RONW (%age)					

Sodium Hypochlorite

0

ANNEXURE - 12

SHAREHOLDING PATTERN AND STAKE STATUS

(₹ in lacs)

Shares	**Face Value ₹/ Share**	**Share Capital**				
534850	**10.00**	**53.48**				
Particulars	**Existing**	**Existing**	**Proposed**	**Proposed**	**Total**	**Total**
	%age		**%age**		**%age**	
Capital						
Share Premium						
Total						

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

ANNEXURE - 13 0

QUANTITATIVE DETAILS OF OUTPUT, SALES AND STOCKS

Particulars	UOM	Operating Years				
		1 - 2	2 - 3	3 - 4	4 - 5	5 - 6
Determined Capacity P.A of Products/Services	.					
Sodium Hypochlorite	MT					
Achievable Efficiency/Yield % of Products/Services/Items						
Sodium Hypochlorite	%					
Net Usable Load/Capacity of Products/Services/Items						
Sodium Hypochlorite	MT					
No of Shifts Wkg./Day						
No of Working Days/Year						
Expected Usage/Utilisation of Achievable Load/Capacity (%)						
Sodium Hypochlorite	%					
Expected Usage/Output						
Sodium Hypochlorite	MT					
Total						

Sodium Hypochlorite

ANNEXURE - 13 0

QUANTITATIVE DETAILS OF OUTPUT, SALES AND STOCKS

Particulars	UOM	Operating Years				
		1 - 2	2 - 3	3 - 4	4 - 5	5 - 6
Expected Sales/ Revenue/ Income of Products/ Services/ Items						
Sodium Hypochlorite	MT					

Sodium Hypochlorite

ANNEXURE - 14 0.00

PRODUCT-WISE DOMESTIC SALES REALISATION

(₹ in lacs)

Operating Year	UOM	Quantity	Rate	Sales
Description of Product				
1-2				
Sodium Hypochlorite	MT			
Year Totals ::				
2-3				
Sodium Hypochlorite	MT			
Year Totals ::				
3-4				
Sodium Hypochlorite	MT			
Year Totals ::				
4-5				
Sodium Hypochlorite	MT			
Year Totals ::				
5-6				
Sodium Hypochlorite	MT			
Year Totals ::				

Sodium Hypochlorite

ANNEXURE - 15 0.00

TOTAL RAW MATERIAL COST

(₹ in lacs)

Operating Year / Description of Product	UOM	Output Quantity	Adj. for WIP Stks	Total Quantity	Cost Per Unit	Material Type I	Material Type II	Total
1-2								
Sodium Hypochlorite	MT							
Total Raw Mat.Requirement								
2-3								
Sodium Hypochlorite	MT							
Total Raw Mat.Requirement								
3-4								
Sodium Hypochlorite	MT							
Total Raw Mat.Requirement								
4-5								
Sodium Hypochlorite	MT							
Total Raw Mat.Requirement								
5-6								
Sodium Hypochlorite	MT							
Total Raw Mat.Requirement								

Sodium Hypochlorite

0

ANNEXURE - 16

RAW MATERIAL COST PER UNIT

(Amount in ₹)

Description of Product / Description of Raw-Material	UOM	Qty.Per Batch	Losses %age	Total Quantity	Rate Per Unit	Total	Batch Qty of Output	Amount Per Unit
Sodium Hypochlorite								
Caustic Soda	MT							
Chlorine Liquid	MT							
Sub Totals								
Add Loss/Wastage @ 0.00%	0.00%					-		
Totals (Indigenous)								

Sodium Hypochlorite

ANNEXURE - 17 0.00

TOTAL LAB & ETP CHEMICALS COST

(₹ in lacs)

Operating Year / Description of Product	UOM	Output Quantity	Adj. for WIP Stks	Total Quantity	Cost Per Unit	Total
1-2						
Lab & Other Chemicals Cost						
Year Total: :						
2-3						
Lab & Other Chemicals Cost						
Year Total: :						
3-4						
Lab & Other Chemicals Cost						
Year Total: :						
4-5						
Lab & Other Chemicals Cost						
Year Total: :						
5-6						
Lab & Other Chemicals Cost						
Year Total: :						

Sodium Hypochlorite

ANNEXURE - 18 0.00

CONSUMABLES, STORES AND SPARES EXPENSES

(₹ in lacs)

Operating Year / Description of Product	UOM	Output Quantity	Adj. for WIP Stks	Total Quantity	Cost Per Unit	Total
1-2						
Consumable Store						
Year Total: :						
2-3						
Consumable Store						
Year Total: :						
3-4						
Consumable Store						
Year Total: :						
4-5						
Consumable Store						
Year Total: :						
5-6						
Consumable Store						
Year Total: :						

Sodium Hypochlorite

0

ANNEXURE - 19
TOTAL PACKING MATERIAL COST

(₹ in lacs)

Operating Year / Description of Product	UOM	Output Quantity	Adj. for WIP Stks	Total Quantity	Cost Per Unit	Total
Sodium Hypochlorite	Nos					
Year Total: :						
2-3						
Sodium Hypochlorite	Nos					
Year Total: :						
3-4						
Sodium Hypochlorite	Nos					
Year Total: :						
4-5						
Sodium Hypochlorite	Nos					
Year Total: :						
5-6						
Sodium Hypochlorite	Nos					
Year Total: :						

Sodium Hypochlorite

0

ANNEXURE - 20

PACKING MATERIAL COST PER UNIT

(Amount in ₹)

Description of Product / Description of Packing Material	UOM	Qty.Per Batch	Losses %age	Total Quantity	Rate Per Unit	Total	Batch Qty of Output	Amount Per Unit
Sodium Hypochlorite								
Printed HDPE Rocket Carboys (50 Ltrs.)	Nos							
Sub Total								
Add Loss/Wastage @ 0.00 %								
Product Total								

Sodium Hypochlorite

ANNEXURE - 21 0.00

EMPLOYEES EXPENSES

(₹ in lacs)

Placement / Designation	Dept./ Category	Starting Year	Starting Month	No.of Persons	Pay Per Month	Total Per Annum
Factory Personnel						
As Applicable from Year 1						
Manager						
Chemical Engineer						
Laboratory Chemist						
Supervisors						
Skilled Workers						
Electrician cum Fitter						
Unskilled Workers						
Accountant						
Computer Operators						
Office Staffs						
Sales Executives						
Store Keeper						
Peons						
Security Guards						
T O T A L						
Welfare Expenses						
Y e a r T o t a l						
T o t a l (Factory)						

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

ANNEXURE - 21 0.00

EMPLOYEES EXPENSES

(₹ in lacs)

Placement / Designation	Dept./ Category	Starting Year	Starting Month	No.of Persons	Pay Per Month	Total Per Annum
Grand Total						

EMPLOYEES EXPENSES

Operating Year	%age Increase	Total
1-2		
2-3		
3-4		
4-5		
5-6		

Sodium Hypochlorite

0

ANNEXURE - 22
FUEL EXPENSES

(₹ in lacs)

Operating Year	%age Increase	Total
1-2		
2-3		
3-4		
4-5		
5-6		

Sodium Hypochlorite

0

ANNEXURE - 23

POWER/ELECTRICITY EXPENSES

(₹ in lacs)

Operating Year	%age Increase	Total
1-2		
2-3		
3-4		
4-5		
5-6		

Sodium Hypochlorite

0

ANNEXURE - 24

ROYALTY AND OTHER CHARGES

(₹ in lacs)

Operating Year	%age Increase	Total
1-2		[redacted]
2-3	[redacted]	
3-4		
4-5		
5-6		

Sodium Hypochlorite

0

ANNEXURE - 25

REPAIRS AND MAINTENANCE EXPENSES

(₹ in lacs)

Particulars	%age to Assets Value	Total
Buildings		
-Factory Building		
Plant & Machineries		
-Imported Machineries		
-Indigenous Machineries		
-Maintenance Equipments		
-Laboratory Equipments		
-Miscellaneous Machines		
-Foundation, Installation		
-Motor Vehicles		
-Office Automation Equipments		
-Furniture & Fixtures		
TOTAL		

Operating Year	% Increase	Total
1-2		
2-3		
3-4		
4-5		
5-6		

Sodium Hypochlorite

0

ANNEXURE - 26

OTHER MANUFACTURING EXPENSES

(₹ in lacs)

Particulars	Total
Insurance Professional Fees	
Water Exp.	
T o t a l	

Operating Year	% Increase	Total
1-2		
2-3		
3-4		
4-5		
5-6		

Sodium Hypochlorite

0

ANNEXURE - 27

ADMINISTRATIVE AND GENERAL EXPENSES

(₹ in lacs)

Particulars	Total
Administration Expense	
Stationery Exp., Telephone, Postage	
Repairs and Maintanance	
Internet Expenses	
Conveyance Exp.	
Publicity Exp.	
T o t a l	

Operating Year	% Increase	Total	Misc	Total
1-2				
2-3				
3-4				
4-5				
5-6				

Sodium Hypochlorite

0

ANNEXURE - 28

SELLING AND DISTRIBUTION EXPENSES

(₹ in lacs)

Operating Year	% Increase	Total
1-2		0.50
2-3		
3-4		
4-5		
5-6		

Sodium Hypochlorite

ANNEXURE - 29 0.00

DEPRECIATION CHARGES AS PER BOOKS (TOTAL)

(₹ in lacs)

Operating Year	F.Assets Type A-1	F.Assets Type A-2	F.Assets Type B	F.Assets Type C	F.Assets Type D-1	F.Assets Type D-2	Total
Particulars	Factory Building -	Office Buildings	PLANT & MACHINERY	Office Vehicles	Office Automation Equipments (Telephone/ Fax/ Computer)	Furniture & Fixtures	
1-2							
2-3							
3-4							
4-5							
5-6							

Sodium Hypochlorite

ANNEXURE - 29 0.00

DEPRECIATION CHARGES AS PER BOOKS (TOTAL)

(₹ in lacs)

Particulars	Method	Deprn.Rate	Part Consideration (for Asset put to use less than 6 months)
Type A :: Buildings			
Factory Building -	WDV		
Office Buildings	WDV		
Type C			
Office Vehicles	WDV		
Type D :: Misc. Fixed Assets			
Equipments (Telephone/ Fax/ Computer)	WDV		
Furniture & Fixtures	WDV		

Type B :: Plant & Machineries (All calculation are given in Annexure 30)

Contingencies, Pre-operative Expenses and Capital WIP are capitalised as under (₹ in lacs)

Description	P & P Expenses	Contingencies	Capital WIP	Total
Factory Building -				
Total				

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

ANNEXURE - 30 0.00

DEPRECIATION CHARGES AS PER BOOKS (P&M)

(₹ in lacs)

Operating Year	F.Assets Type B-1	F.Assets Type B-2	F.Assets Type B-3	F.Assets Type B-4	F.Assets Type B-5	F.Assets Type B-6	Total
PLANT & MACHINERY	Imported Machineries	Indigenous Machineries	Erection & Installation	Laboratory Equipments	Miscellaneous Material Handling Equipments	Maintenance Equipments	
1-2							
2-3							
3-4							
4-5							
5-6							

Sodium Hypochlorite

ANNEXURE - 30 0.00

DEPRECIATION CHARGES AS PER BOOKS (P&M)

(₹ in lacs)

Particulars	Method	Dep.Rate	Part Consideration, if any
Imported Machineries	WDV		
Indigenous Machineries	WDV		
Erection & Installation	WDV		
Laboratory Equipments	WDV		
Miscellaneous Material Handling Equipments	WDV		
Maintenance Equipments	WDV		

Contingencies, Pre-operative Expenses and Capital WIP are capitalised as under

(₹ in lacs)

Description	P & P Expenses	Contingencies	Capital WIP	Total
Imported Machineries				
Indigenous Machineries				
Erection & Installation				
Laboratory Equipments				
Miscellaneous Material Handling Equipments				
Maintenance Equipments				
Total				

Prepared by "Niir Project Consultancy Services"

Sodium Hypochlorite

ANNEXURE - 31 0.00

DEPRECIATION CHARGES AS PER INCOME TAX ACT (WDV) (TOTAL)

(₹ in lacs)

Operating Year	F.Assets Type A-1	F.Assets Type A-2	F.Assets Type B	F.Assets Type C	F.Assets Type D-1	F.Assets Type D-2	Total
Particulars	Factory Building -	Office Buildings	PLANT & MACHINERY	Office Vehicles	Office Automation Equipments (Telephone/ Fax/ Computer)	Furniture & Fixtures	
1-2							
2-3							
3-4							
4-5							
5-6							

Depreciation hereinabove is calculated as per WDV at rates prescribed under I.T.Act

Sodium Hypochlorite

ANNEXURE - 31 0.00

DEPRECIATION CHARGES AS PER INCOME TAX ACT (WDV) (TOTAL)

Particulars	Method	Dep.Rate	Part Consideration (for Asset put to use less than 6 months)
Type A :: Buildings			
Factory Building	WDV		
Office Building	WDV		
Type C			
Motor Vehicles	WDV		
Type D :: Misc. Fixed Assets			
Office Automation Equipments	WDV		
Furniture & Fixtures	WDV		

Type B :: Plant & Machineries(All calculation are given in Annexure 32)

Sodium Hypochlorite

ANNEXURE - 32 0.00

DEPRECIATION CHARGES AS PER INCOME TAX ACT(WDV) (P&M)

(₹ in lacs)

Operating Year	F.Assets Type B-1	F.Assets Type B-2	F.Assets Type B-3	F.Assets Type B-4	F.Assets Type B-5	F.Assets Type B-6	Total
PLANT & MACHINERY	Imported Machineries	Indigenous Machineries	Erection & Installation	Laboratory Equipments	Miscellaneous Material Handling Equipments	Maintenance Equipments	
1-2							
2-3							
3-4							
4-5							
5-6							

Depreciation hereinabove is calculated as per WDV at rates prescribed under I.T.Act

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ANNEXURE - 32 0.00

DEPRECIATION CHARGES AS PER INCOME TAX ACT(WDV) (P&M)

Particulars	Method	Dep.Rate	Part Consideration, if any
Imported Machineries	WDV		
Indigenous Machineries	WDV		
Maintenance Equipments	WDV		
Laboratory Equipments	WDV		
Miscellaneous Equipments	WDV		
Foundation, Installation etc.	WDV		

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ANNEXURE - 33 0.00

INTEREST AND REPAYMENT ON TERM LOANS

(₹ in lacs)

A	Name of Institution-Bank	ABC BANK	
B	Term Borrowing Amount		Lacs
C	Repayment Term (Years)		Years
D	Repayment Instalments		Instalments
E	Repayment Commencement		
F	Rate of Interest(General)		p.a.
F	Rate of Interest(Initial)		p.a.
G	Apply Gen. Int. Rate from Yea		
H	Interest Calculation		

Operating Year	Period Ended	Repayment	Outstanding	Interest
	Quarter Ended			
1-2				
	TOTAL :			
2-3				
	TOTAL :			
3-4				
	TOTAL :			
4-5				
	TOTAL :			
5-6				
	TOTAL :			
Total Loan amount				

Note : Repayment is considered as being made at the end of the period

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ANNEXURE - 34

TAX ON PROFITS

(₹ in lacs)

Particulars	Operating Years				
	1-2	2-3	3-4	4-5	5-6
Net Profit Before Taxes					
Adjustments to NPBT					
Add : Depreciation as provided					
Less : Depreciation as per IT					
Recomputed NPBT					
Taxable Profits					
(%)					
Tax on Profits					

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ANNEXURE - 35 0.00

PROJECTED PAY-BACK PERIOD AND IRR

(₹ in lacs)

Particulars	Operating Years					
	1-2	2-3	3-4	4-5	5-6	Total
IN-FLOW of Funds						
Net Profit After Taxes						
Added Back						
Depreciation Charges						
P & P Expenses W/off						
Interest Charges						
Revenue Inflow of Funds						
Residual Value-M/Money						
Total Inflow of Funds						
OUT-FLOW of Funds						
Capital Out-flow of Funds						

(₹ in lacs)

Projected Pay Back Period					
Particulars	**Operating Years**				
	1-2	**2-3**	**3-4**	**4-5**	**5-6**
Year	**1**	**2**	**3**	**4**	**5**
Initial Investment					
Total Initial Investment					
Yearly Cash Flow					
Accumulated Cash Flow					
Pay Back Period	**2 Years 3 Months**		**2 Years 9.77months**		

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ANNEXURE - 35 0.00

PROJECTED PAY-BACK PERIOD AND IRR

(₹ in lacs)

Projected IRR			
Year	**CFAT**	**PV factor @15%**	**0.15**
Initial Investment			
1-2			
2-3			
3-4			
4-5			
5-6			
Total PV			
IRR			

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PROJECT AT A GLANCE (₹ in lacs)

COST OF PROJECT				MEANS OF FINANCE			
Particulars	**Existing**	**Proposed**	**Total**	**Particulars**	**Existing**	**Proposed**	**Total**
Land & Site Development Exp.				Capital			
Buildings				Share Premium			
Plant & Machineries				Other Type Share Capital			
Motor Vehicles				Reserves & Surplus			
Office Automation Equipments				Cash Subsidy			
Technical Knowhow Fees & Exp.				Internal Cash Accruals			
Franchise & Other Deposits				Long/Medium Term Borrowings			
Preliminary& Pre-operative Exp				Debentures / Bonds			
Provision for Contingencies				Unsecured Loans/Deposits			
Margin Money - Working Capital							
TOTAL				**TOTAL**			

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PROJECT AT A GLANCE 0

Year	Annualised		Book Value	Debt	Dividend	Retained Earnings		Payout	Probable Market Price	P/E Ratio	Yield Price/ Book Value
	EPS	CEPS	Per Share		Per Share	Per Share				No.of Times	
	₹	₹	₹	₹	₹	%	₹	%	₹		%
1-2											
2-3											
3-4											
4-5											
5-6											

Year	D. S. C. R.			Debt / - Deposits Debt	Equity as- Equity	Total Net Worth	Return on Net Worth	Profitability Ratio					Assets Turnover Ratio	Current Ratio
	Individual	Cumulative	Overall					GPM	PBT	PAT	Net Contribution	P/V Ratio		
	(Number of times)			(Number of times)		%	%	%	%	%		%		
Initial														
1-2														
2-3														
3-4														
4-5														
5-6														

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PROJECT AT A GLANCE 0

BEP	
BEP - Maximum Utilisation Year	
Cash BEP (% of Installed Capacity)	
Total BEP (% of Installed Capacity)	
IRR, PAYBACK and FACR	
Internal Rate of Return .. (In %age)	
Payback Period of the Project is (In Years)	
Fixed Assets Coverage Ratio (No. of times)	