

Textile Auxiliaries and Dyestuff Industry

**Dyeing Auxiliary, Finishing Auxiliary,
Dyes and Dye Intermediates,
Textile Auxiliary, Chemicals
with Manufacturing Processes
and Formulations**

Introduction

The Textile Auxiliaries are specially used for washing and dyeing of yarns and fabrics. These auxiliaries are formulated for textile products in the forms of cationic, non-ionic, surfactants and amphoteric. Textile chemicals are the specialty chemicals used by textile processing industry for dyeing and processing of textiles in order to get the final end product with required characteristics.

Many companies are nowadays manufacturing textiles auxiliaries like wetting agent, sequestering agent, detergent, polyamide softeners, silicon softeners, anti-back staining agent, different fixing agents etc.

Dyestuff industry plays an important role in the economic development of the country. The Indian Dyestuff Industry, which was primarily started to cater to the needs of domestic textile industry, now not only meets more than 95% requirement of the domestic market, but has gradually also made a dent in the global market. It is one of the core chemical industries in India. It is also the second highest export segment in chemical industry. The Indian dyestuff industry is made up of about 1,000 small scale units and 50 large organized units, who produce around 1,30,000 tonnes of dyestuff.

The major users of dyes in India are textiles, paper, plastics, printing ink and foodstuffs. The textile industry is the major consumer of dyestuffs and about 70% of the total production is consumed by this sector. Globally the dyestuffs industry has seen an impressive growth. Dyestuff can be used for Printing inks, plastics, textiles, paper and foodstuff. The world consumption for dyestuff accounts for printing inks at 40%, paints 30%, plastics 20% and others from segments like textiles.

Textile auxiliaries are defined as chemicals of formulated chemical products which enables a processing operation in preparation, dyeing, printing of finishing to be carried out more effectively or which is essential if a given effect is to be obtained. Certain Textile Auxiliaries are also required in order to produce special finishing effects such as wash & wear, water repellence, flame retardancy, aroma finish, anti odour, colour deepening etc. The prime consideration in the choice of Textile materials is the purpose for which they are intended, but colour has been termed the best salesman in the present scenario.

The modern tendency is towards an insistence on colour which is fast to light, washing, rubbing, and bleaching; this movement makes a great demand on the science of dyeing. Auxiliaries, dyes and dye intermediates play a vital role in textile processing industries. The manufacture and use of dyes is an important part of modern technology. Because of the variety of materials that must be dyed in a complete spectrum of hues, manufacturer now offer many hundreds of distinctly different dyes. The major uses of dyes are in coloration of textile fibers and paper. The substrates can be grouped into two major classes-hydrophobic and hydrophilic.

Hydrophilic substances such as cotton, wool, silk, and paper are readily swollen by water making access of the dye to substrate relatively easy. On other hand hydrophobic fibers, synthetic polyesters, acrylics, polyamides and polyolefin fibers are not readily swollen by water hence, higher application temperatures and smaller molecules are generally required. Dyes are classified according to the application method. Some of the examples of dyes are acid dyes, basic or cationic dyes, direct dyes, sulfur dyes, vat dyes, reactive dyes, mordant dyes etc. Colorants and auxiliaries will remain the biggest product segment, while faster gains will be seen in finishing chemicals.

World demand for dyes and organic pigments is forecast to increase 3.9 percent per year through 2013, in line with real gains in manufacturing activity. Volume demand will grow 3.5 percent annually. While the textile industry will remain the largest consumer of dyes and organic pigments, faster growth is expected in other markets such as printing inks, paint and coatings, and plastics. Market value will benefit from consumer preferences for environmentally friendly products, which will support consumption of high performance dyes and organic pigments.

The market for textile chemicals in India is highly fragmented and comprises of over 300 large and small players. India Textile Auxiliaries Market is anticipated to grow at a healthy pace during 2016-2021 on account of increasing demand for these chemicals in various applications such as home furnishing and apparel, technical textile. The rising advancements in the textile industry of India is due to changing lifestyle and

increased spending capacity of Indian population which is subsequently, driving the textile chemicals market of India.

Textile dyeing industry, which includes both domestic market and exports, is projected to grow at 9% CAGR to reach USD 210 billion by 2022; domestic textile market in India is expected to grow at a CAGR of 8% to reach USD 127 billion by 2022.

Some of the fundamentals of the book are antimony and other inorganic compounds, halogenated flame retardants, phosphorous compounds, dyes and dye intermediates, textile fibers, pigment dyeing and printing, dry cleaning agents, dry cleaning detergents, acrylic ester resins, alginic acid, polyvinyl chloride, sodium carboxy methyl cellulose, guar gum, industries using guar gum, gum tragacanth, hydroxyethyl cellulose, polyethylene glycol, industries using polyethylene glycols, etc.

The book covers details of antimony and other inorganic compounds, halogenated flame retardants, silicone oils, solvents, dyes and dye intermediates, dry cleaning agents, different types of gums used in textile industries, starch, flame retardants for textile and many more. This is very resourceful book for new entrepreneurs, technologists, research scholars and technical institutions related to textile.

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can provide Process Technology Book on
Textile Auxiliaries, Dyes and Dye
Intermediates

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- *Coal & Coal Byproduct*

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- *Essential Oils, Oils & Fats And Allied*
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- *Herbal Based Projects*
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- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

- *Paints, Pigments, Varnish & Lacquer*
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- *Potato And Potato Based Projects*
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- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
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- *Water Industry(Packaged Drinking Water & Mineral Water)*
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