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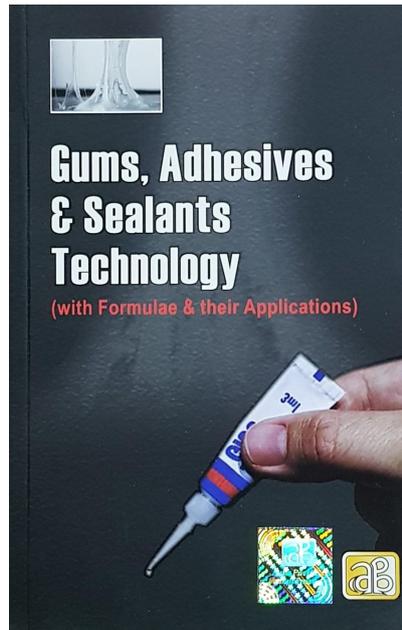
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Gums, Adhesives & Sealants Technology (with Formulae & their Applications) 2nd Edition

Code	NI8
Format	paperback
Indian Price	₹1475
US Price	\$150
Pages	700
ISBN	9788178330952
Publisher	Asia Pacific Business Press Inc.

Description

Naturally occurring polysaccharides from plant exudates have been in use from many decades in immense quantities. Natural gums are natural polymers, which mainly consists of carbohydrates sometimes with small amounts of proteins and minerals. Gum and its derivatives are widely used in various industries as per its needs. The appearance and properties of natural gums determine their commercial value and end use. Due to their extraordinary, unrivalled technological & functional properties gum is used in many industries. Gums not only modify viscosity and consistency, they also often attenuate odour, taste and flavour intensity. Adhesive or sealant is a mixture in a liquid or semi-liquid state that is capable of holding materials together by surface attachment. Adhesives and sealants are used as a raw material for the manufacturing industry or for the service of different processing industries. Adhesives and sealants virtually touch every part of our lives. The adhesives and sealants are two chemically similar but functionally different groups of formulated products. There is no end in sight to the new materials, new formulation, and new uses to which adhesives and sealants will be put in the future.

Some of the fundamentals of the book are advantages of adhesive bonding, hybrids and coupling agents, adhesive films, designing polymers for adhesives, fundamentals of adhesion, designing polymers for adhesives, thermodynamics of adhesion, casein and mixed protein adhesives, lime-free casein adhesives, foil to paper laminating adhesives, casein and protein blend glues as wood adhesives, chemistry of protein blend glues, natural rubber adhesives, vulcanizing latex adhesives, solution adhesives from natural rubber, halogenated butyl rubber, butyl rubber and poly isobutylene lattices, polysulfide sealants and adhesives etc.

This book covers a wide range of polymeric adhesives and sealants, gums along with their essential formularies, distinguished by applications and based on technology. The main areas covered in details are the basic fundamentals, properties, uses and applications, formulations and chemistry, methods of manufacturing and lastly testing methods. This book will be very resourceful to its readers who are just beginners in this field and also to upcoming entrepreneurs, engineers, existing industries, technologist, technical institution etc.

Content

I INTRODUCTION TO ADHESIVES

ADVANTAGES OF ADHESIVE BONDING

HISTORY

TYPES OF ADHESIVES

Application and Setting

Origin

Cure; Solubility; Crosslinking

Hybrids and coupling Agents
Adhesive Films
High Temperature Resistance; Flame Retardance
MATCHING ADHESIVE TO ADHEREND
Critical Surface Tension
Solubility Parameter
Figure
DESIGNING POLYMERS FOR ADHESIVES
Grafting
Reactive Oligomers and Polymers
Copolymerization
Block Copolymers
Interpenetrating Polymer Network (IPN)
NEW TRENDS

I FUNDAMENTALS OF ADHESION
INTRODUCTION
Bond Types
Setting
Adhesive Joint Strengths
SURFACES AND THEIR CHARACTERIZATION
Solids
Liquids
INTERFACES
Thermodynamics of Adhesion
Acid-Base Considerations
SURFACE TREATMENT
Metal
Polymers
MEASUREMENT OF ADHESION
Introduction
Test Methods
STRENGTH OF ADHESION
Introduction
Molecular Interactions
Autohesion
Durability
Nondestructive Evaluation of Bonds
I ANIMAL GLUE
CHEMISTRY
MANUFACTURING

PROPERTIES
TEST GRADES
TESTING
CUSTOMER PREPARATION OF GLUE SOLUTIONS
LIQUID ANIMAL GLUES
FLEXIBLE AND NON-WARP GLUES
GLUE APPLICATION
COATED ABRASIVES
SET-UP WHEELS
GREASELESS BUFFING COMPOUNDS
GUMMED TAPE
GLASS CHIPPING
SIZING AND COATING
PAPER
COMPOUNDED RUBBER
GASKET MANUFACTURING
MATCHES
METAL REFINING
OTHER APPLICATIONS FOR ANIMAL GLUE

I CASEIN AND MIXED PROTEIN ADHESIVES

Manufacture of Casein

Specifications and Typical Analyses for Casein

CHEMISTRY AND PHYSICAL PROPERTIES OF GLOBULAR PROTEIN

CHEMICAL PROPERTIES OF CASEIN

PHYSICAL PROPERTIES OF CASEIN

Other Viscosity Factors

LIME-FREE CASEIN ADHESIVES

Preparation of Casein Solutions, General

Preservatives

Preparation of an Alkaline Casein Solution

Additives for Casein Solutions

APPLICATIONS USING CASEIN SOLUTIONS AND ADHESIVES

Casein as a Protective Colloid

Paper Coatings

Foil-to-Paper Laminating Adhesives

Ice Water Lable Paste Adhesives

CASEIN AND PROTEIN BLEND GLUES AS WOOD ADHESIVES

Chemistry of Protein Blend Glues

Formulation and Chemistry of Casein-Lime Glues

Mixing Casein Glue

Additives for Casein and Protein Blend Glues

Uses of Casein Glues

Specifications Applying to Casein Glue

Viscosity and Pot Life

Certification of Fire Doors

Properties of Casein Glues

Durability of Casein Glues

I STARCH BASED ADHESIVES

MODIFICATION OF STARCHES

Fluidity Starches

Oxidized Starches

Dextrinization

Hydroxyethylation

Cationic Starches

Amphoteric Starches

Miscellaneous Derivatives

EFFECT OF ADDITIVES

Sodium Hydroxide

Borax

Urea

Glycerol

Soluble Soaps

Urea-Formaldehyde Resin

Miscellaneous Additives

STARCH ADHESIVES

Jelly Gums

Other Liquid Formulations

Pastes

Borated Dextrins

White Dextrins

Canary Dextrins

British Gums

Waxy Starch Dextrins

Dextrin/Silicate Blends

Pregelatinized Starches

APPLICATION AREAS

Papermaking

Paper Coating

Corrugating

Bag Adhesives

Laminating Adhesives
Tube Winding
Corrugated Boxes
Gummed Tapes
Label and Envelope Adhesives
Paper Box
Textiles
Wall Covering Adhesives
Miscellaneous Uses
GOVERNMENTAL REGULATIONS: ADDITIVES

I NATURAL RUBBER ADHESIVES

INTRODUCTION

RAW MATERIALS

Natural Rubber Latex

Preservation

Dry Natural Rubber

Natural Rubber Grafted with Methyl Methacrylate (Heveaplus MG)

Depolymerized Rubber

Synthetic Polyisoprene

FORMULATION OF LATEX ADHESIVES

Quick-Grab Adhesive

Self-Adhesive Envelopes

Latex Pressure-Sensitive Adhesives

Tile Adhesives

Reseal Adhesives

Anchor Coat for Tufted Carpets

Other Nonvulcanizing Latex Adhesives

Vulcanizing Latex Adhesives

SOLUTION ADHESIVES FROM NATURAL RUBBER

Nonvulcanizing Adhesives

Vulcanizing Adhesives

Mastics, Asphaltics, and Sealants

GRAFTED COPOLYMER HEVEAPLUS MG

FORMULATIONS

I BUTYL RUBBER AND POLYISOBUTYLENE

INTRODUCTION

BASIC PROPERTIES

Butyl Rubber

Polyisobutylene

Halogenated Butyl Rubber

Butyl Rubber and Polyisobutylene Latices

Modified Butyls

FORMULATING AND PROCESSING

Choice of Polymer

Pigments and Fillers

Tackifiers, Plasticizers, and Other Polymeric Additives

Curing Systems

Solvents and Solution Processing

Mixing and Processing Techniques and Guidelines

APPLICATIONS AND FORMULATIONS

Adhesives and Mastics

Sealants

Mixing

I NITRILE RUBBER ADHESIVES

INTRODUCTION

PREPARATION OF NITRILE RUBBER

EMULSION TECHNOLOGY

Functionally Terminated Telechelic Liquid Polymers

COMPOUNDING NITRILE RUBBER CEMENTS

Polymer Selection and Solubilization

Types of Compounding Ingredients

APPLICATION

Nitrile Rubber Systems

Nitrile Rubber/Phenolic Adhesives

Nitrile Rubber/Epoxy Adhesives

I STYRENE-BUTADIENE RUBBER ADHESIVES

INTRODUCTION

Perspective

History of SBR

Manufacture of SBR

Basic Chemistry of SBR

SBR LATEXES IN ADHESIVES

General

Classification

Benefits of SBR Latexes

Compounding Ingredients

Major Applications

SBR (SOLID) IN ADHESIVES

General

Classification
Compounding Ingredients
Major Applications

I NEOPRENE (POLYCHLOROPRENE) - BASED SOLVENT AND LATEX ADHESIVES

HISTORY

THE EFFECT OF POLYMER STRUCTURE

NEOPRENE SOLVENT-BASED ADHESIVE CEMENTS

Types of Neoprene

Antioxidants

Metal Oxides

Resins

Fillers

Curing Agents

Solvents

Adhesive Processing

End Uses

Application Methods

NEOPRENE LATEX-BASED ADHESIVES

Anionic Types

Nonionic Type

Compounding

Typical Formulations

I POLYSULFIDE SEALANTS AND ADHESIVES

POLYSULFIDE SEALANTS

Chemistry

Compounding

Curing Agents

Fillers

Plasticizers

Adhesion

Primers

Specifications

ADHESIVES FROM POLYSULFIDE LIQUID

POLYMER-EPOXY RESIN REACTIONS

Chemistry

Physical Properties

Applications

OTHER MERCAPTAN-TERMINATED POLYMERS

Polyethers
Polyesters
Urethanes
Olefin

I PHENOLIC RESIN ADHESIVES

CHEMISTRY

Formaldehyde

Novolaks

Strong Acid Reactions

Weak Acid Reactions

Resoles

Dispersion Resoles

Resin Cure

MANUFACTURE

ABRASIVES

Bonded Abrasives

Coated Abrasives

COATINGS

FOUNDRY

FRICITION COMPOSITES

MOLDING COMPOUNDS

PHOTORESISTS AND CARBONLESS PAPER

LAMINATING

WOOD BONDING

INSULATION AND FOAM

GENERAL ADHESIVES

ENVIRONMENTAL AND TOXICOLOGICAL CONSIDERATIONS

I AMINO RESIN ADHESIVES

HISTORY

RAW MATERIALS

CHEMISTRY

END USES

Particleboard

Plywood

High-Pressure Decorative Laminates

Miscellaneous Applications

TOXICITY

I EPOXY RESIN ADHESIVES

INTRODUCTION

EPOXY RESINS USED IN ADHESIVES

Bisphenol A Based Epoxy Resins

Epoxy Novolac Resins

High performance Epoxy Resins

Flexible Epoxy Resins

CURING AGENTS USED IN ADHESIVES

Polysulfide

Amines

Aliphatic Amines

Cycloaliphatic Amines

Aromatic Amines

Polyamides

Amidoamines

Dicyandiamide

Catalytic Curing Agents

Anhydrides

SUMMARY

DILUENTS

FILLERS

ELASTOMERIC MODIFIERS

TYPICAL ADHESIVE FORMULATIONS

COMPLEMENTARY TECHNOLOGIES

Robotics

Induction Curing

APPLICATIONS AND SUMMARY

I POLYURETHANE - AND ISOCYANATE - BASED ADHESIVES

REASONS FOR THE EFFECTIVENESS

OF POLYURETHANE AND ISOCYANATE-BASED
ADHESIVES 321-323

TYPES AND USE OF POLYURETHANE

AND ISOCYANATE BASED ADHESIVE SYSTEMS

Method A (isocyanate primer)

METHOD B (CONVENTIONAL PLASTIC OR
RUBBER VEHICLE + ISOCYANATE)

The Relative Effectiveness of "Vulcabond" T and Tx in
Rayon Cord-to-Natural Rubber Adhesion

Method C (in situ polyurethane polymerization)

Method D (polyurethane elastomer without or
with added polyisocyanate)

Method E (blocked di-or polyisocyanate)

Method F (aqueous dispersion)

Method G (film and tape)

Method H (powder)

POLYURETHANE STABILIZATION

HANDLING ISOCYANATE BASED ADHESIVES

IDENTIFICATION OF ADHESIVE COMPONENTS

I POLYOLEFIN AND ETHYLENE COPOLYMER-BASED

HOT MELT ADHESIVES

ADHESIVE FORMULATION

Polymers

Tackifiers

Waxes

HOT MELT ADHESIVES APPLICATIONS

Cases, Cartons, and Trays

Bookbinding

Nonwovens

Furniture

Labels

Polyester Beverage Bottles

Carpet Seaming Tape

Paper Laminates

HOT MELT APPLICATION EQUIPMENT

FUTURE OF HOT MELT ADHESIVE

I POLYVINYL ACETAL ADHESIVES

CHEMISTRY

HEALTH, TOXICOLOGY, AND SAFETY

PHYSICAL PROPERTIES

Solubility

Compatibility

Viscosity

Mechanical Properties

Thermal Properties

USES AS AN ADHESIVES

Hot Melts

Thermosetting Adhesives

Adhesion to Metal

Adhesion to Natural Surfaces

Green Strength Binder

Composites
Adhesion to Glass
Other Uses

I ACRYLIC ADHESIVES

TECHNOLOGY

Chemistry
Glass Transition Temperature (T_g)

Crosslinked Thermosets

BONDING PROCESSES

Pressure Sensitive
Contact Bonding
Heat and Pressure Bonding

Vacuum Bonding

Wet Laminating Adhesives

Filled Adhesives

ENGINEERING ADHESIVES

Chemistry and Technology

Radiation Curing

Application Processes

Current Uses

I PRESSURE-SENSITIVE ADHESIVES FOR TAPES AND LABELS

CONSTRUCTIONS

Manufacture

Backings

Release Coatings and Liners

ADHESIVE SYSTEMS

Tackifiers

Rubber-Based Adhesives

Acrylics

Silicones

Miscellaneous Polymers

Surface Energetics

Tack

Peel Adhesion

Cohesive Strength

TEST METHODS

Tack Testing

Peel Adhesion Testing

Shear Resistance Testing

Miscellaneous Tests

Tapes

Labels and Decals

Other Products

Adhesive Mass Thicknesses

I FACTORS INFLUENCING GUM COSTS AND APPLICATIONS

DEFINITION OF GUM

FACTORS AFFECTING RAW GUM COSTS

1. Exudate Gums
2. Seaweed Gums
3. Seed Gums
4. Starch and Cellulose Derivatives

INDUSTRIALLY VALUABLE PROPERTIES OF GUMS

1. Linear Neutral Polysaccharides
2. Branched Neutral Polysaccharides
3. Polysaccharides with Carboxyl Groups
4. Polysaccharides with Strong Acid Groups
5. Polysaccharides with basic Groups

MODIFIED GUMS

1. Introduction of Neutral Groups
2. Introduction of Acidic Groups
3. Introduction of Groups
4. Graft Polymers
5. Other Chemical Modifications of Natural Polysaccharides

I AGAR

INTRODUCTION

SOURCE

1. Raw Material
2. Processing
3. Finished Product

HISTORY

1. Discovery
2. Manufacture
3. Use
4. Present Applications
5. Derivatives

IV. STRUCTURE

PROPERTIES

1. Solid

2. Sols
3. Gels

I ALGIN

INTRODUCTION

PRODUCTION

1. Source
2. Seasonal Variations
3. Harvesting
4. Processing
5. Grades
6. Industrial Importance
7. Potential Amount

APPLICATIONS

1. Introduction
2. Mode of Action
3. Foods

DAIRY PRODUCTS

BAKERY PRODUCTS

OTHER FOOD PRODUCTS

4. Pharmaceuticals and Cosmetics
5. Industrial Applications

PAPER PRODUCTS

TEXTILE PRODUCTS

RUBBER PRODUCTS

OTHER INDUSTRIAL USES

STRUCTURE

PROPERTIES

1. Dissolution
2. Solution Properties
3. Gels
4. Films
5. Compatibilities
6. Algin in Foods
7. Other Properties

I LAMINARAN

INTRODUCTION

PRODUCTION

1. Source
2. Producing Areas

3. Seasonal Effects

4. Collection

5. Preparation

HISTORY OF DEVELOPMENT

STRUCTURE

PROPERTIES

I CHITIN AND ITS DERIVATIVES

INTRODUCTION

PRODUCTION

1. Crustaceans

2. Insects

3. Fungi

4. Preparation

5. Preparation of Deacetylated Chitin, Other Chitin

Derivatives, and D-Glucosamine

6. Grades

7. Potential Amount

HISTORY

IV APPLICATION

1. Sizing

2. Adhesives

3. Emulsion Stabilization and Thickening

4. Pharmaceuticals and Cosmetics

5. Extruded Fibers and Films

6. Glycosamine Hydrochloride in Foods and Pharmaceuticals

STRUCTURE

PROPERTIES

1. Solubility and Viscosity

2. Gels

3. Films and Fibers

4. Adhesiveness

5. Compatibilities

I GUM ARABIC

INTRODUCTION

PRODUCTION

1. Republic of the Sudan

3. Nigeria

4. Tanganyika

5. Morocco

6. British Somaliland and Abyssinia

7. South Africa

8. India

9. Australia

10. Miscellaneous

TYPES OF GUM IN THE UNITED STATES

STRUCTURE

ARABIC ACID

1. Preparation

2. Properties

3. Degraded Gum Arabic

4. Derivatives of Arabic Acid

FACTORS WHICH AFFECT VISCOSITY

1. Concentration

2. Temperature

3. Electrolytes

4. pH

5. Solvents Other Than Water

6. Aging

7. Mechanical Treatment

8. Ultrasonic Vibrations and Ultraviolet Irradiation

OTHER PHYSICAL PROPERTIES

1. Surface Tension

2. Freezing Point

COACERVATION

1. Introduction

2. Gum Arabic-Gelatin Coacervates

3. Preparation of Coacervates

4. General Properties, Physical Appearance, and Composition

5. Effect of Temperature

6. Effect of pH

7. Reactions of Salts

8. Physical Phenomena

9. Uses of Gum Arabic-Gelatin Coacervates

10. Coexisting Coacervates

11. Other Coacervates

CHEMICAL PROPERTIES

1. Chemical Reactivity

2. Solubility

3. Enzymes

SEPARATION AND IDENTIFICATION OF GUM ARABIC

1. Isolation of Gum Arabic from Commercial Products
2. Systematic Analytical Scheme
3. Physical Confirmatory Tests
4. Chemical Confirmatory Tests
5. Direct Tests for Gum Arabic in Some Commercial Products

USES

1. Foods
2. Adhesives
3. Paints
4. Inks
5. Lithography
6. Textiles
7. Miscellaneous

I CORN HULL GUM

INTRODUCTION

SOURCE AND PREPARATION

DEVELOPMENT OF USE

STRUCTURE

PROPERTIES

I GUAR GUM

INTRODUCTION

PRODUCTION

1. Source and Producing Areas
2. Agronomics
3. Purification
4. Grades

USES

1. HISTORY

2. Mining Industry
3. Foods
4. Cosmetics and Pharmaceuticals
5. Paper Industry
6. Explosives
7. Derivatives

STRUCTURE

PROPERTIES

1. Viscosity
2. Gels
3. Films

4. Adhesiveness
5. Miscellaneous

I GUM KARAYA INTRODUCTION

Production

1. Source
2. Producing Areas
3. Seasonal Effect
4. Collection
5. Purification
6. Grades
7. Impurities
8. Potential Amount

USES

1. History
2. Commercial Value

STRUCTURE

PROPERTIES

1. Dissolution and Viscosity Measurements
2. Gels
3. Films
4. Adhesiveness
5. Acid Resistance
6. Dispersibility
7. Ropiness
8. Water Retention

I PECTIN

INTRODUCTION

PRODUCTION

1. Source
2. Producing Areas
3. Seasonal Effects
4. Collection
5. Purification
6. Grades and Definitions of Grades
7. Impurities
8. Quantities Marketed
9. General Industrial Uses Other Than is Foods

FOOD

Mode of Action

Structure

Properties

1. Pectin Types as Defined by Degree of Methylation
2. Solubility
3. Solutions, Stability and Viscosity
4. Gels
5. Assay Methods, Calculations, and Composition

DIRECTORY SECTION

PRESENT MANUFACTURERS

SUPPLIERS OF RAW MATERIALS

SUPPLIERS OF THE PLANT M/C & EQUPT.

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