The Complete Book on Water Soluble Gums and Resins

Author:- H. Panda
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Resins, gums and latex are almost ubiquitous in the plant kingdom and many of them continue to play an important role in our daily lives. Numerous plants produce some kind of resin, latex or gum, but only a few are commercially important today, even though their uses and applications are truly manifold. They have been used as adhesives, emulsifiers, thickening agents, they are added to varnishes, paints and ink; they lend their aromas to perfumes and cosmetics and even play a role in pharmacy and medicine. Gums are viscous substances which are secreted by the bark of certain trees. Usually transparent (but sometimes slightly tinted) they contain a mucilage which when dissolved in water makes the latter become viscous. When this mucilage is dissolved in water it can be made to precipitate with alcohol. Resins, on the other hand, are gluey and viscous substances which may be whitish, brownish, or red and are secreted by certain trees when they are incised. Resins contain an essence and are usually not water soluble. Most commonly found types of plant exudates are chemically completely different to gums. Several acacia species are important economically. True gums are complex organic substances mostly obtained from plants, some of which are soluble in water and others of which, although insoluble in water, swell up by absorbing large quantities of it. They are used in adhesives, pharmaceuticals, inks, confections, and other products. Resins are terpene based compounds. Terpenes constitute one of the largest groups of plant chemicals and they can be very complex. They are not water soluble, but can be either oil soluble or spirit soluble, depending on their specific chemical composition. Worldwide interest and activity in gums and resins has grown dramatically in the last few years. Governments, environmentalists, research institutions and other interest groups are among those who have begun to push for stronger support for gums and resins as a way to meet a range of economic, social and environmental goals.
Some of the fundamentals of the book are photosynthesis and metabolism of carbohydrates, occurrence, properties and synthesis of the monosaccharides, nitrogen derivatives, carbohydrates in parenteral nutrition, essential carbohydrates, ethers, anhydro sugars and unsaturated
derivatives, constitution of nicotinic acid and of nicotinamide, industrial methods of preparing nicotinic acid and nicotinamide, general physiology, metabolism and mechanism of the vitamin action etc.

This book gives a complete insight of water soluble gums and resins that are used in day to day life in various Industries. It is an invaluable resource to all its readers, students, scientist, new entrepreneurs, existing industries and others.

1. CARBOHYDRATES
1. PHOTOSYNTHESIS AND METABOLISM OF CARBOHYDRATES
Photosynthesis
Introduction
Structural Aspects of the Photosynthetic Apparatus
Kinetic Studies on Photosynthesis
Bacterial Photosynthesis
The Hill Reaction
The Path of Carbon in Photosynthesis
The Biosynthesis of Carbohydrates by Plants
Monosaccharides
Oligosaccharides
Starch
Sugar Alcohols
Sugar Acids
Carbohydrate Biochemistry
Pathways for the Metabolism of Carbohydrates
Interconversion of the Sugars
2. OCCURRENCE, PROPERTIES AND SYNTHESIS OF THE MONOSACCHARIDES
Naturally Occurring Monosaccharides
Origin and Preparation of Some Naturally Occurring Monosaccharides
Synthetic Sugars
Complete Synthesis of the Sugars
Methods for Lengthening the Carbon Chain of the Sugars
Methods for Shortening the Carbon Chain of Sugars
Methods Based on Changing the Configuration of Other Sugars
Methods for the Synthesis of Deoxysugars
Preparation of Ketoses by Biochemical Oxidation of Alcohols
Aldose to Ketose Conversion Utilizing the Osones
Methods for Isotope-Labeled Sugars
3. OLIGOSACCHARIDES
Synthesis of Oligosaccharides
Rearrangement and Degradation of Oligosaccharides
Condensation of Two Monosaccharide Units
Determination of Structure
Ease of Acid Hydrolysis
Preparation, Properties, and Structures of Some Oligosaccharides of Natural Origin
Miscellaneous Disaccharides
Tri-, Tetra-, and Pentasaccharides
Miscellaneous Tri- and Tetrasaccharides
Enzymic Synthesis of Oligosaccharides
Synthesis of Sucrose by the Mechanism of Phosphorolysis
Synthesis of Analogs of Sucrose and Maltose by Sucrose and Maltose Phosphorylases
Synthesis of Disaccharides by Transglycosidation Through the Action of Sucrose Phosphorylase
Synthesis of Oligosaccharides by Transglycosidation Through the Action of Hydrolytic Enzymes
Miscellaneous Oligosaccharides
4. NITROGEN DERIVATIVES
Glycosylamines, Nucleic Acids and Hydrolysis Products, Hydrazones, Osazones, Oximes, Amino Sugars, etc.
Glycosylamines

Unsubstituted Glycosylamines
N-Substituted Glycosylamines
Nucleotides
Preparation and Structures
Nucleoside Di- and Triphosphoric Acids
Biologically Important Substances Related to Nucleotides
Nucleic Acids
Combinations of Sugars with Amino Acids and Proteins
Preparation
Protein-Carbohydrate Compounds as Synthetic Antigens
Reactions of the Sugars with Substituted Hydrazines and Hydroxylamine
Hydrazones and Osazones
Comparison or Weygand-Reckhaus and Bloink-Pausacker Mechanisms
Oximes
Derivatives in which an Amino Group Replaces a Primary or Secondary Hydroxyl Group
Amino Sugars (Glycosamines)
Glycamines and Aminodeoxyalditols
5. ROLE OF CARBOHYDRATES IN DENTAL CARIES
Dietary Carbohydrates in Diabetes and Nutrition
Carbohydrate Sweeteners in Nutrition: Fact and Fantasy
Consumption
Cost
Acceptability
Safety
Availability, Convenience, Quality
6. CARBOHYDRATES IN NUTRITION
General Aspects
Caloric Value
Digestion and Absorption
Starches
Dextrins
Maltose
Sucrose
D-glucose (Dextrose)
D-fructose (Levulose)
D-Mannose
D-galactose and Lactose
Lactose and the Microflora of the Digestive Tract
?-Lactose vs. ?-Lactose
C. Influence of the Glycosidic Linkage on the Utilization of Lactose
Adaptation to Lactose Ingestion
Laxative Action of Lactose
Cataractogenic Action of Lactose
Galactosemia Associated with Cataracts in Humans
Lactose and Calcium Metabolism
Cellobiose
Rare Sugars
Xylose Toxicity
Sugar Alcohols (Alditols)
Hexosamines
Cellulose and Related Substances
Sweetness and Flavoring Characteristics of Sugars
Appetite for Carbohydrate

Blood Glucose and the Urge to Eat
Synthesis of Vitamins by the Intestinal Microflora
Protein Sparing Action
Sugar in Candy and Carbonated Beverages
Carbohydrates and Weight Control
Carbohydrates in Parenteral Nutrition
7. ESSENTIAL CARBOHYDRATES
The Active Compounds and Their Properties
Pathological States Caused by a Deficiency of the Active Compounds
Specificity Studies
The Physiological Action of the Active Compounds
Requirements
8. INOSITOL
Nomenclature
Names
Chemical formula
Empirical Formula
Occurrence
Isolation
Properties
Chemistry
Industrial Methods of Preparation
Biogenesis
Specificity
Determination
Physiology of Plants and Microorganisms
Animal Physiology
Avitaminosis
Hypervitaminosis
Requirements
9. ETHERS, ANHYDRO SUGARS AND UNSATURATED DERIVATIVES
Ether Derivatives (External)
Alkylation Methods
Trityl Derivatives
Anhydro Derivatives
Methods of Preparation
Reactions of Anhydro Sugars
Unsaturated Derivatives
Glycals
Glycoseens and Alditoleens
10. PANTOTHENIC ACID
Nomenclature and Survey
Names
Probably also identical with
Empirical formula
Structural formula
Chemical name
Efficacy
Occurrence
Isolation
Properties
Chemical Constitution

Synthesis
Industrial Methods of Preparation
Biogenesis
Specificity
Determination
Standards
Physiology of Plants and Microorganisms
Animal Physiology
Avitaminosis and Hypovitaminosis
Hypervitaminosis
Requirements
11. NICOTINIC ACID—NICOTINAMIDE
Nomenclature and Survey
Names
Chemical formulas
Chemical names
Empirical formulas
Occurrence of Nicotinic Acid and of Nicotinamide
Isolation of Nicotinic Acid and of Nicotinamide
Properties of Nicotinic Acid and of Nicotinamide
Constitution of Nicotinic Acid and of Nicotinamide
Synthesis
Industrial Methods of Preparing Nicotinic Acid and Nicotinamide
Biogenesis of Nicotinic Acid
Enzyme Systems Containing Nicotinamide
Coenzymes Containing Nicotinamide
Mechanism of the Nicotinamide Coenzyme Action
Specificity of Nicotinic Acid and Nicotinamide
Determination of Nicotinic Acid and Nicotinamide
Chemical Methods
Biochemical Methods
Biological Methods
Standard of Nicotinic Acid and Nicotinamide
Physiology of Plants and Microorganisms
Animal Physiology
General Physiology, Metabolism and Mechanism of the Vitamin Action
Avitaminosis
Clinical Test Methods
Hypervitaminosis
Nicotinic Acid Requirements
2. CELLULOSE
1. ANALYSIS
Properties and Composition
Manufacture of Chemical Cellulose
Specifications for Chemical Cellulose
Methods of Analysis
Identification
Determination of Polymer Composition
Determination of Carbohydrate Composition
Determination of Noncarbohydrate Impurities
Determination of Physical Properties
End-use Tests
2. DERIVATIVES OF CELLULOSE

Analysis of Cellulose Derivatives
Cellulose Nitrate
Properties
Methods of Manufacture
Methods of Analysis
Cellulose Acetate
Methods of Analysis
Cellulose acetate Butyrate and Cellulose Acetate Propionate
Properties
Methods of Analysis
Ethylcellulose
Properties
Methods of Manufacture
Methods of Analysis
Methylcellulose and Its Derivatives
Properties
Methods of Manufacture
Methods of Analysis
Hydroxyethylcellulose and Its Derivatives
Properties
Methods of Manufacture
Methods of Analysis
Sodium Carboxymethylcellulose
Properties
Methods of Manufacture
Commercial Grades and Specifications
Methods of Analysis
3. STRUCTURE AND MECHANICAL PROPERTIES OF CELLULOSE
Fine Structure
Internal Appearance of Fibres
Crystallinity
Orientation
Micellar and Intermicellar Structure
Mechanical Properties
Experimental Work
Correlation between Fine Structure and Mechanical Properties
Effect of Moisture
4. DECRYSTALLIZATION OF COTTON CELLULOSE
Methods of Decrystallization
Stability of Decrystallization
Effect of Decrystallization on the Properties of the Fibre
Mechanism of Amine Treatment
5. EFFECT OF CELLULOSE STRUCTURE ON TENSILE PROPERTIES OF COTTON
Degree of Crystallinity
Degree of Fibrillar Orientation
Measurement of Orientation
Effect of Orientation on Tensile Properties
Degree of Polymerization
Determination of D.P.
Effect of D.P. on Physical Properties
6. CREASE RESISTANCE OF CELLULOSIC TEXTILES

IN RELATION TO FABRIC GEOMETRY
Poor Recovery in Cotton Fabrics
Background
Effect of Fabric Construction on Crease Recovery
Conclusion
7. MERCERIZED COTTON FIBRES
Preparation of Samples
Measurement of Crystalline Orientation
Mechanical Behaviour
8. ALKALI-SENSITIVE LINKAGES IN IRRADIATED CELLULOSE
Materials and Methods
Results and Discussion
9. HYDRATED OXIDES AS BARRIERS AGAINST ACTINIC DEGRADATION OF CELLULOSE
Experimental Procedure
Results and Discussion
10. HYDRATED OXIDES AS BARRIERS AGAINST CELLULOSE DEGRADATION BY ULTRA-VIOLET IRRADIATION
Experimental Procedure
Results and Discussion
11. SODIUM METAPERIODATE OXIDATION OF CELLULOSE AND CELLOBIOSE
Experimental Procedure
Oxidation of Cellobiose
Preparation of Derivatives
Oxidation of Cellulose
Discussion
Summary
12. BIOSYNTHESIS OF CELLULOSE
Synthesis in Cotton Plant
Russian Work
Cellulose Accumulation in Cotton Boll and Fibre
American Work
Microorganisms
13. REACTIONS OF CELLULOSE WITH CROSS LINKING AGENTS
14. CHEMICAL MODIFICATION OF TEXTILE CELLULOSES
Structure of Cellulose
Properties of Textile Cellulose
Elongation and Elastic Properties
Flex Life, Tear Strength and Wear Life
Wet Strength, Dimensional Stability, Wash and Crease-resistance and Drape
Bulk Density and Warmth
Lustre
Slipperiness and Resistance to Clinging
Resistance to Soiling
Permeability
Water Repellency, Absorbency, Quick Drying, Electrical Insulation and Dye-receptivity
Mildew and Rot resistance
Heat and Flame Resistance
Ion-exchange Properties

15. CELLULOSE ETHERS
Hydroxyethyl Cellulose
Work at Shri Ram Institute
16. ANTI-CREASE AND ANTI-SHRINK FINISHES FOR VISCOSE RAYONS
Resin Finishes and Formaldehyde Treatment
Srifirset Process
Development
Outline of the Process
Properties of Treated Fabrics
Equipment
Large Scale Trials
Some Advantages
Cost of treatment
17. MICROBIAL DECOMPOSITION OF CELLULOSE WITH SPECIAL REFERENCE TO COTTON AND COTTON FABRICS
18. ROLE OF MOISTURE IN HEAT TREATMENT OF RESIN-TREATED CELLULOSIC TEXTILES
Fibre Properties and Moisture Content
Modification of Fibre Properties During Heat Treatment
Temperature and Moisture Content
Migration of Solutes and Solvents during Heat Treatment Summary

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business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.

NIIR PROJECT CONSULTANCY SERVICES, 106-E, Kamla Nagar, New Delhi-110007, India.
Email: npcs.india@gmail.com **Website**: NIIR.org

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