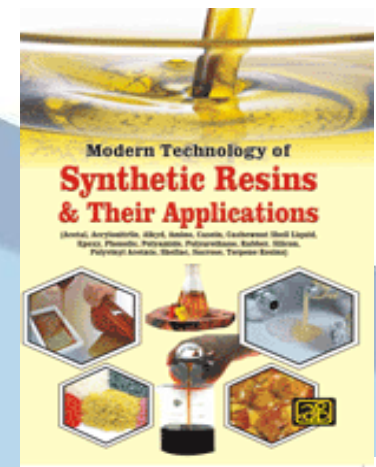
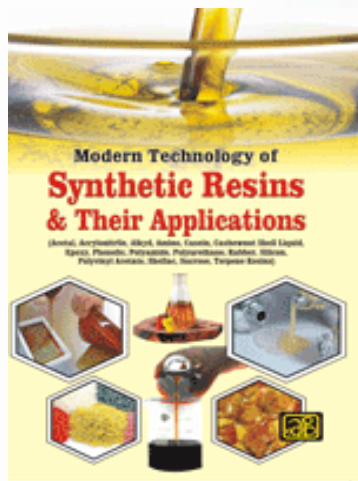


# Modern Technology of Synthetic Resins & their Applications

(Acetal, Acrylonitrile, Alkyd, Amino, Casein, Cashew Nut Shell Liquid, Epoxy, Phenolic, Polyamide, Polyurethane, Rubber, Silicon, Polyvinyl Acetate, Shellac, Sucrose, Terpene Resins)



# Introduction

Synthetic resin - a resin having a polymeric structure particularly a resin within the raw state; used chiefly in plastics. Synthetic resins are industrially produced resins, usually viscous substances that convert into rigid polymers by the process of natural action. So as to bear curing, resins generally contain reactive finish teams, such as acrylates or epoxides. Some synthetic resins have properties almost like natural plant resins, however several don't.



Synthetic resin, short for resin is artificial synthesized high molecular polymer. Therefore, different types of plastic can be called after the name of the synthetic resin it is made from.

Synthetic resin, the basic raw material of plastic, takes up 30%~60% or a lot of its composition. It's the function of agglutination, not solely binding itself together, however additionally the opposite materials firmly together. Because the type, property, and quantity of polymer amendment, the physical and mechanical properties of plastic additionally change. Therefore, the most properties of plastic depend on the synthetic resin it's made up of.



Synthetic resin is chemical compound created by combining carbon atom, hydrogen atom, and little amount of atomic number 8 atom, sulphur atom through sure attractive force. According to the different combining types of carbon atoms in a molecule, the molecular structure of synthetic resin is assessed into three geometric shapes line type, branched chain type, and somatotype (also called reticular type).

**Related Projects:** - [Adhesives and Sealants, Industrial Adhesives, Glues, Gums and Binders, Synthetic Resin, Resins](#)



According to the different synthetic method during the production, synthetic resin can be classified into polyaddition resin and polycondensate resin.

Polyaddition resin, also called polymerized resin, is made by breaking the unsaturated double bond of monomeric compound through initiator, and combining it again in covalent bond, thus forming a huge polymer molecule.

The common polyaddition resins are polyethylene (PE), polyvinyl chloride (PVC), polystyrene (PS), polyvinyl acetate (PVAC), polypropylene (PP), polymethacrylic acid (PMMA), and acrylonitrile butadiene styrene (ABS), etc.



Polycondensate resin, also called condensation resin, is made by combining two or three types of monomeric compounds in functional groups, which is rid of the small molecules after being heated or catalyzed. The common polycondensate resins are [phenolic resin](#) (PF), urea formaldehyde resin (UF), epoxy resin (EP), unsaturated polyester (UP), polyurethane resin (PU), and silicone resin (SI).

**Related books:** - [Synthetic Resins, Oleoresins And Pine Chemicals Technology](#)



# Applications

The applications of synthetic resins are seen in some important industries like paint industry, adhesive industry, the printing ink industry, the textile industry, the leather industry, the floor polish, paper, agricultural industry, Packaging, Building Material, Electronics, etc.



# Market Outlook

By virtue of properties like lightweight, durability, rigidity, and also the ability to act as an excellent barrier, synthetic resins are generally chosen as one of the key raw materials to manufacture totally different kinds of flexible packages. The proliferation of the e-commerce sector is making a considerable demand of a range of flexible packages that, in turn, is business to the spend growth in the synthetic resins market. This growth is driven by the high demand for epoxy resins in manufacturing various construction materials, like paints, solvents, coatings, adhesives, casting, additives, and composites.

**Related Books:** - [Synthetic Resins, Surface Coating, Paints, Varnishes & Lacquers](#)



Governments within the countries in APAC is about to unveil a series of housing schemes to accommodate the growing population in the region. This may increase the demand for various [construction materials](#), like paints, coatings, and [adhesives](#). Consequently, this may lead to an exponential demand for synthetic resins in APAC. Currently, this region is dominating the worldwide synthetic resins market and is anticipated to make a significant contribution to the global spend share during the forecast period. Meanwhile, in the US, the increasing adoption of versatile packages by the food and beverages business can drive the demand for synthetic resins. Usage of synthetic resins within the producing of automotive elements is thought to cut back their weight by up to 30%. This is often leading to the high rate of adoption of synthetic resins by the automotive companies within the US.



The global Synthetic Resin market was valued at million US\$ in 2018 and will reach million US\$ by the end of 2025, growing at a CAGR of during 2019-2025. Resins market is growing globally, although APAC is estimated to be the most lucrative region, accounting for a substantial 44% share in the global resins market. The sheer affluence of APAC is attributable to the flourishing automotive industries in India, China and Japan, the growing construction sector and increasing infrastructural operations particularly in India and China, and voluminous packaging operations that are avid employer of resins. Foremost application of resins includes paints and coatings for [infrastructure](#) as well as automotive, and packaging films and polymers. Further analysis into the growth trajectory of adjacent markets in APAC provides a clearer understanding.



## Key Players

Huntsman International LLC, MCC Chemicals, Inc., UPC Technology Corporation, Bayer AG, DSM, Assa Abloy AB, Akolite Synthetic Resins, Sinopec Corporation, Formosa Plastics Group, Purolite, Kansai Paint Co., Ltd., Lawter, Inc., D.S.V Chemicals, RÜTGERS Group, The Dow Chemical Company, NAN YA PLASTICS Corporation, Momentive, KUKDO CHEMICAL Co. Ltd., Gellner Industrial, LLC, Synresins Ltd., Chang Chun Group

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# Tags

#OrganicCompounds, #SyntheticResins #projectreport  
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- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*



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- *Detailed Project Reports/Pre-feasibility Reports*
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- *Turnkey Project Consultancy/Solutions*
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- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*



# Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

# Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

# Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*



- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
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- *Coconut And Coconut Based Products*
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- *Coal & Coal Byproduct*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*



- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
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- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitability Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

- *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.*

# Sectors We Cover *Cont...*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*



- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
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