

# Pharmaceutical, Drugs, Proteins Technology Handbooks

[Business Ideas for Startup in Drugs & Pharmaceutical Industry with  
Project Profiles \(3rd Edition\)](#)

**Author:** Ajay Kumar Gupta

**Format:** Paperback

**Book Code:** NI5

**Pages:** 159

**ISBN:** 9788195676958

**Price:** Rs. 2,595.00 **US\$** 65.00

Business Ideas for Startup in Drugs & Pharmaceutical Industry with Project Profiles(L-Ascorbic Acid (Plain), Pharmaceutical Unit, Ciprofloxacin Hydrochloride, Paracetamol, Paracetamol (BP/IP/US6P Grade), Sterile Water for Injection, Active Pharma Ingredients Metformin and Ciprofloxacin, IV Fluid (BFS Technology)) The Drugs & Pharmaceutical Industry refers to the sector that is involved in the development, production, and distribution of pharmaceutical drugs. It encompasses a wide range of activities, including research and development, clinical trials, manufacturing, marketing, and sales. This industry plays a crucial role in improving the health and well-being of individuals around the world. Pharmaceutical companies are responsible for creating and manufacturing drugs that are used to prevent, diagnose, and treat diseases and medical conditions. These drugs undergo rigorous testing and must be approved by regulatory authorities before they can be brought to market. They are produced in various forms, such as tablets, capsules, injections, and creams, and are prescribed by healthcare professionals to patients. The Drugs & Pharmaceutical Industry operates on a global scale, with companies based in different countries and catering to diverse markets. It is a highly regulated sector, with strict guidelines and protocols in place to ensure the safety and efficacy of drugs. The industry is constantly evolving, with new research and advancements in technology driving innovation. The pharmaceutical drugs market is expected to reach \$1,848.49 billion at a CAGR of 11.4%. The rise in sedentary jobs, busy lifestyles, and changing consumer preferences are affecting the disease profile of the world population, especially non-communicable diseases such as cancer, diabetes, and cardiovascular diseases. Long working hours, less physical activity, and unhealthy eating and drinking habits are major causes of chronic diseases such as diabetes. The major contents of the book are production of L-Ascorbic Acid (Plain), Pharmaceutical Unit, Ciprofloxacin Hydrochloride, Paracetamol, Paracetamol (BP/IP/USP Grade), Sterile Water for Injection, Active Pharma Ingredients Metformin and Ciprofloxacin, IV Fluid (BFS Technology) Manufacturing Process, Project Profiles (with cost estimation) and process flow diagrams. This book is also a fantastic resource for people interested in or who have worked in the Drugs & Pharmaceutical Industry. While primarily designed for

entrepreneurs and startups, this book also serves as an invaluable resource for investors, consultants, pharmaceutical professionals, and academicians. Its holistic approach ensures that it caters to a broad spectrum of readers, all of whom have a stake in the prosperous future of the drugs and pharmaceutical industry. In "Business Ideas for Startup in Drugs & Pharmaceutical Industry with Project Profiles", you aren't just purchasing a book; you're acquiring a partner for your entrepreneurial journey. A partner that will guide, inform, and support you at every step, ensuring your venture in the drugs and pharmaceutical world is both profitable and groundbreaking. This is the only book that covers the process of making commercial Drugs & Pharmaceutical Products. From concept through equipment procurement, it is a veritable feast of how-to information.

# The Complete Technology Book on Starch and Its Derivatives

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI81

**Pages:** 540

**ISBN:** 8178330733

**Price:** Rs. 1,100.00 US\$ 29.73

Starch is a group of poly saccharides, composed of glucopyranose units joined together by glucosidic linkages. Starch is also metabolized for energy in plants and animals, and is used to produce a large number of industrial products. Starch is processed to produce many of the sugars in processed foods. The biggest industrial non food use of starch is as adhesive in the paper making process. Other important fields of starch application are textiles, cosmetic and pharmaceutical uses. Starch can be obtained from maize, sorghum, roots and tubers such as tapioca, arrow root, potatoes etc. Starch truly serves as a multifunctional ingredient in the food industry. Starch is one of the most present biomaterials has witnessed significant developments over the years. By products are obtained in the manufacture of different types of starch such as maize gluten has a number of interesting possible uses in industry, zein (by product of corn processing) is used in the preparation of stable glass like plastics, modification of zein is used as adhesives and in the preparation of coating compositions for paper, the most important by product from wheat starch manufacture is gluten which is used in preparing diabetic foods, for feeding cattle, thickening agent in textile printing and so on. The Global starch market is likely to get respite from deceleration in its market growth, with growth poised to receive a new lease of life in the next few years. This book basically illustrates about the properties, structures, manufacturing process explained with flowcharts and diagrams, applications of starch and its derivatives etc. The major contents of the book are structure and chemical properties of starch, chemical composition, molecular structure, starch granule properties, water sorption and granule swelling as a function of relative humidity, factors affecting starch paste properties, the oxidation of starch etc. This is a unique book, concise, up to date resource offering a valuable presentation of the subject. This book contains processes of starch and its derivatives. This book is an invaluable resource for new entrepreneurs, industrialists, consultants, libraries.

# Drugs & Pharmaceutical Technology Handbook

**Author:** NIIR Board

**Format:** Paperback

**Book Code:** NI130

**Pages:** 636

**ISBN:** 8178330547

**Price: Rs. 1,075.00 US\$ 28.95**

Drugs and pharmaceutical industry plays a vital role in the economic development of a nation. It is one of the largest and most advanced sectors in the world, acting as a source for various drugs, medicines and their intermediates as well as other pharmaceutical formulations. India has come a long way in this field, from a country importing more than 95% of its requirement of drugs and pharmaceuticals; India now is exporting it even to developed countries. Being the intense knowledge driven industry, it offers innumerable business opportunities for the investors/ corporate the world over. The existence of well defined and strong pharmaceutical industry is important for promoting and sustaining research and developmental efforts and initiatives in an economy as well as making available the quality medicines to all at affordable prices. That is, it is essential to improve the health status of the individuals as well as the society as a whole, so that positive contributions could be made to the economic growth and regional development of a country. On the global platform, India holds fourth position in terms of volume and thirteenth position in terms of value of production in pharmaceuticals. The pharmaceutical industry has been producing bulk drugs belonging to all major therapeutic groups requiring complicated manufacturing processes as well as a wide range of pharmaceutical machinery and equipments. The modern Indian Pharmaceutical Industry is recent and its foundation was laid in the beginning of the current century. The pharmaceutical industry can be broadly categorised as bulk drugs, formulations, IV fluids and pharmaceutical aids (such as medical equipment, hospital disposables, capsules, etc.). Special feature of the pharmaceutical industry is a large number of manufacturers in the small scale sector. The government is also encouraging the SSI sector providing some incentives. The recent developments in the technology and R & D work in this field have led to the increased growth rate of industries and have established Indian Pharmaceutical industries in the international market. The content of the book includes information about properties, general methods of analysis, methods of manufacture, of different types of drugs and pharmaceuticals. Some of the fundamentals of the book are polymeric materials used in drug delivery systems , theoretical aspects of friction and lubrication , a convenient method for

conversion of quinine to quinidine, formulation and evaluation of bio-available enteric-coated erythromycin and metronidazole tablets, extraction of virginiamycin, antipyretics and analgesics, column chromatographic assay of aspirin tablets, differentiating titration of phenacetin and caffeine, infrared spectra of some compounds of pharmaceutical interest etc. This book covers an intensive study on manufacturing, production, formulation and quality control of drugs and pharmaceuticals with technology involved in it. This book is an invaluable resource for technologists, professionals and those who want to venture in this field.

# Handbook on Fine Chemicals, Vitamins, Amino Acids and Proteins



**Author:** NIIR Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI159

**Pages:** 608

**ISBN:** 8186623965

**Price:** Rs. 1,450.00 US\$ 29.95

Fine chemicals are the chemicals which are produced in comparatively small quantities and in relatively pure state. In chemical technology, a distinction is made between bulk chemicals, which are produced in massive quantities by standardized reactions, and fine chemicals, which are custom produced in smaller quantities for special uses. Amino acid is any organic acid which has one or more substituent amino groups. In many instances the amino acid is more readily isolated from proteins than by resolution of the synthetic product. For the purpose of obtaining the best yields, it is always desirable to use protein material which is especially rich in the amino acid which is to be isolated. Some of the examples of amino acid are glycine, d glutamic acid, l tyrosine, l tryptophane, l hydroxyproline, thyroxine, serine, d lysine etc. Large quantities of potential protein rich foods of vegetable origin, e.g., oil seed meals and pulses, are available in the country and by suitable processing and fortification with vitamins and minerals, it should be possible to prepare, on a large scale, low cost processed protein foods which can be used as supplements to the diets of low income groups of the population. There are two forms of vitamin A; vitamins A and A2. All mammals, birds and fish which have been investigated, utilize vitamin A. Vitamin A requirements of animals other than mammals are less well known. Birds apparently need vitamin A in an amount of magnitude as mammals. It vitamin B1 is present in many plants. Vegetable, fruits and nuts contain small amounts; ripe peas and beans are rich sources; but vitamin B1 is found outside bran coats of grains (rice) and in yeast. Vitamin B2 (Riboflavin) is very widely distributed over the entire animal and plant kingdom. It seems that each and every animal and plant cell contains small amounts. Regular dietary intake of riboflavin is necessary for all members of the animal kingdom and for some microorganisms. Vitamin B6 as a free base is colourless crystalline powder, has a slightly bitter taste and melts at 160 degree Celsius. Of the entire living world only man, the other primates, the guinea pig a few microorganisms are known to require an external supply of vitamin C. Some of the fundamentals of the book are the constitution and synthesis of the amino acids, methods of analysis and reactions of the amino acids and proteins , production of protein isolate from groundnut, production of protein isolate

from groundnut, chemical constitution of vitamin b2: degradation reactions, vitamin b6 (pyridoxine) , effect of different treatments on vitamin c and microbial sterility of canned drumstick (moringa oleifera), conversion of provitamins d to vitamins d, compound and species specificity of known vitamins d, the group of vitamins e, vitamin p , physiology of plants and microorganisms etc. The aim of this book is to present in a single volume an up to date account of the manufacture of Fine Chemicals, Vitamins, Amino Acids and Proteins. The book includes several new information which comprise important threads in the industrial total fabric. This book contains the constitution and synthesis of the Amino Acids, the Isolation of the Amino Acids from Proteins, the preparation of Amino Acids and Proteins, Vitamins and Fine Chemicals with Method of analysis and reactions etc. The book is very helpful for new entrepreneurs, technocrats, researchers, institutional libraries etc.

## [Directory/ Database/ List of Pharmaceutical & Drugs Companies in India \(5th Edition\)](#)

**Format:** CD-Rom

**Book Code:** NID68

**Price:** Rs. 5,192.00 **US\$** 150.00

Offline Business directory is the best thing in today's business world. If you are searching for Buyers, then this Directory/Database is the perfect tool for you. By having the right business leads, you would be able to have immediate communication with prospective businesses, partners and customers through this boundless list of Pharmaceutical & Drugs Companies in csv excel format. We offer an extensive suite of Directories/ database to assist you in reaching the right businesses and people quickly and easily. Business Directories are used for sales planning, finding Buyers and marketing research to perform business analysis. With our company database/Directory, you will have access to company list. You will find a business list consisting of company contact details. We compiled list of companies in excel format to give you access to over hundred thousands of major & minor businesses and companies. From small business to Corporate Houses, our data is complete with business contact information to help you connect with the right companies or buyers. This database collection is a great resource for those suppliers who offer their goods and services to Pharmaceutical & Drugs Companies like, Packaging Material Suppliers, Drug Suppliers, Pharma Chemical Suppliers, Plant & Machinery Suppliers, Office Equipment Suppliers, Office Furniture Suppliers, Mobile Companies, Raw Material Suppliers, Advertisement Agencies, Office Stationery Suppliers, Transporters, Courier Companies, IT, Software Companies, Labour Contractors, Hospitals, Clinics & Medical Stores etc. Information in this database Contains over 23,000 records of Pharmaceutical & Drugs Companies. Details Includes: Company Name (23,000), Postal Address (19,900), City, Postal Code, Contact Person (6,100), Phone (15,900), E-mail (8,900), Website (2,900), Fax (5,800) and Description. Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel

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## [Delhi & NCR Doctors Directory/ Database/ List \[.xlsx, excel format\] 9th Edition](#)

**Format:** CD-Rom

**Book Code:** NID75

**Price:** Rs. 3,835.00 **US\$** 150.00

Offline Business directory is the best thing in today's business world. If you are searching for Buyers, then this Directory/Database is the perfect tool for you. By having the right business leads, you would be able to have immediate communication with prospective businesses, partners and customers through this boundless list of Delhi & NCR Doctors in csv excel format. We offer an extensive suite of Directories/database to assist you in reaching the right businesses and people quickly and easily. Business Directories are used for sales planning, finding Buyers and marketing research to perform business analysis. With our company database/Directory, you will have access to company list. You will find a business list consisting of company contact details. We compiled list of companies in excel format to give you access to over hundred thousands of major & minor businesses and companies. From small business to Corporate Houses, our data is complete with business contact information to help you connect with the right companies or buyers. This database collection is a great resource for those suppliers who offers their goods and services to Doctors like Drugs & Pharmaceuticals Companies, Pharma & Medical equipments, Hospitals, Software Companies, Pathology Test Laboratories etc. (Delhi, Faridabad, Ghaziabad, Greater Noida, Gurgaon, Noida, etc.) Contains more than 11,800 Records. Details Include: Name (11,800) Centre Name (3,900) Address (12,500) Phone (11,100) E-mail (3,800) Website (750) Specialization (6,300) like ENT, Eye, Dental, Surgeon, General Practitioner, Physician, Gynaecologist, Skin Dermatologists, Physiotherapists, Neurologists ..... Note: All Records does not contain all fields of information. However, maximum Information has been incorporated. Format: MS Excel, .xlsx

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## [Directory/ Database/ List of Hospitals in India \[.xlsx, excel format\]](#) [8th Edition](#)

**Format:** CD-Rom

**Book Code:** NID78

**Price:** Rs. 6,166.00 **US\$** 200.00

Offline Business directory is the best thing in today's business world. If you are searching for Buyers, then this Directory/Database is the perfect tool for you. By having the right business leads, you would be able to have immediate communication with prospective businesses, partners and customers through this boundless list of Hospitals in csv excel format. We offer an extensive suite of Directories/ database to assist you in reaching the right businesses and people quickly and easily. Business Directories are used for sales planning, finding Buyers and marketing research to perform business analysis. With our company database/Directory, you will have access to company list. You will find a business list consisting of company contact details. We compiled list of companies in excel format to give you access to over hundred thousands of major & minor businesses and companies. From small business to Corporate Houses, our data is complete with business contact information to help you connect with the right companies or buyers. This database collection is a great resource for those suppliers who offers their goods and services to Hospitals, Nursing Home like, Medical Disposables Material, X-ray Film, Medical Equipments, Manpower, Lab, Testing equipment, Pharmaceutical Companies, Hospital Furniture, suppliers, Nursing Bureau, IT, Software Companies, Labour Contractors, etc. Information in this database Contains Contacts of 32,800 Hospitals all over India. Details include Hospital Name, Postal Address (32,700), Contact Person (2,100), Phone (22,900 Mobile / Landline), Fax (7,300), Email (10,400), Website (2,850). Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel, xlsx

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## [The Complete Book on Medical Plastics](#)

**Author:** NIIR Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI172

**Pages:** 368

**ISBN:** 8178330008

**Price:** Rs. 975.00 **US\$** 25.95

Plastics currently form one of the most important components of the medical industry. Medical device designers and engineers increasingly prefer plastics to conventional packaging materials such as metals owing to superior flexibility offered by plastics in fabrication process.

Advancements in sterilization techniques shift towards disposable devices, development of enhanced plastic materials, and technological innovations are factors driving the overall market growth and expansion. The development of novel materials such as biocompatible polymers for use in medical implants will furthermore provide the required impetus for the global medical plastics market. Every day, plastics are involved in critical surgeries, life saving efforts, and routine medical procedures. Plastic materials can be sterilized hundreds of times without degradation. Lightweight plastics are used to form replacement joints, non surgical supports, and therapy equipment. Clear plastics provide visibility for transfusions, surgeries, and diagnostic equipment of all kinds and plastics can be machined, molded, or formed into almost any shape imaginable. The use of plastics in health care field encompasses several distinct markets. Plastic is used on a large scale as medical devices like disposable syringes, optical and dental products, heart valves, contact lenses and many more medical products. This way plastic has very importance in making medical devices. The medical plastics industry is set to expand rapidly over the next decade taking up increasing proportions of GDP, as countries provide healthcare to an ageing population, access to medicine expands in developing regions and new technology is developed. This book basically deals with significance of packaging for pharmaceuticals & medical industry, tablets & capsules liquids, creams and ointments, OPVC, OPP and oriented and non oriented pet containers, blister trays for ampoules, cartridge tubes etc., shrink packaging and stretch wrapping, conducting health based risk assessments of medical materials, performance properties of metallocene polyethylene, EVA, and flexible PVC films, polyurethane thin film welding for medical device applications, polyurethane film as an alternative to PVC and latex, opportunities for PVC replacement in medical solution containers, thermoplastic silicone urethane copolymers : a new class of biomedical elastomers, selecting materials for

medical products : from PVC to metallocene polyolefins, injection molding engineering plastics, assessing the performance and suitability of parylene coating etc. The present book contains the important information of plastics in medical field and their uses in various ways. This is very useful book for entrepreneurs, researchers, technocrats and technical institutions.

# [The Complete Book on Biotechnology Based Bulk Drugs](#)



**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI194

**Pages:** 488

**ISBN:** 9788190439879

**Price:** Rs. 1,050.00 **US\$** 27.95

Biotechnology has played an essential role in the development of the healthcare chemical industries. The range of product includes diagnostic, prophylactic and therapeutic agents. The discovery of a potentially active compound starts a sequence of exhaustive chemical and biological testing that may culminate in manufacture of the agent or an improved analog. The role of biotechnology in this complex path to regulatory approval and marketing is diverse. Biotechnology is a field of applied biology that involves the use of living organisms and bioprocesses in engineering, technology, medicine and other fields requiring bio products. Biotechnology also utilizes these products for manufacturing purpose. Some of the examples of drugs produced through biotechnology are penicillin, lincomycin, streptomycin, tylosin, peptide antibiotics, cephalosporins, etc. Modern use of similar terms includes genetic engineering as well as cell and tissue culture technologies. Biotechnology draws on the pure biological sciences and in many instances is also dependent on knowledge and methods from outside the sphere of biology. Conversely, modern biological sciences are intimately entwined and dependent on the methods developed through biotechnology and what is commonly thought of as the life sciences industry. The development of biotechnology is taking place in almost all fields of human life. The recent advances in the field of basic genetics have opened up new vistas, potentials and possibilities. Some of the fundamentals of the book are the pharmaceutical industries, marketing strategy, common features in the evolution of products and processes, process technology fermentation, product recovery, new trends in biotechnology, penicillins, biosynthesis and regulation of thienamycin, olivanic acids and epithienamycins, aminoglycoside antibiotics, streptidine and deoxystreptamine, streptomycin, neomycin, paromomycin, ribostamycin and butirosin gentamicin, micronomicin and sisomicin, tylosin, peptide antibiotics, current applications of peptides, blasticidin S: an agricultural antibiotic bleomycin and bestatin: peptides used in anticancer therapy etc. The present book contains process of biotechnology based bulk drugs like penicillin, B lactam antibiotics, aminoglycoside antibiotics, peptide antibiotics, anti cancer agents, lincomycin etc. This is very resourceful book for entrepreneurs, technocrats, research scholars, libraries etc.

## [Directory / Database of Corporate/Leading Companies in Indian Pharmaceutical & Drug Products \(with Financial Figures\) 10th Edition \[.xlsx, excel format\]](#)

**Format:** CD-Rom

**Book Code:** NID140

**Price:** Rs. 5,015.00 **US\$** 150.00

Contains: 1,277 records with following Information: Name of Company, Address, City, Pin Code, Phone, Fax, Email (994), Website (591). Name of Directors, Location of Plants, Project Capacity, Production, Name of Products, Turnover, Product industry Code, List of Major Raw Materials with their consumption quantity & Raw material value, credit ratings. Comparison amongst companies ( Cash Flow, Cost as % of sales, Forextransactions, Growth in Assets & Liabilities, Growth in Income & Expenditure, Income & expenditure, Liabilities, Liquidity Ratios, Profitability Ratio, Profits, Return Ratios, Structure of Assets & Liabilities (%), Assets, Working Capital & Turnover Ratios) (\*Wherever available) Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel, .xlsx

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## [Handbook on Drugs from Natural Sources](#)

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI229

**Pages:** 480

**ISBN:** 9788178331331

**Price: Rs. 1,175.00 US\$ 125.00**

Natural products have played an important role throughout the world in treating and preventing human diseases. Natural product medicines have come from various materials including terrestrial plants, terrestrial microorganisms, organisms etc. Historical experiences with plants as therapeutic tools have helped to introduce single chemical entities in modern medicine. About 40% of the drugs used are derived from natural sources. Most are pure substances which are isolated from various organisms & used directly or after chemical modification. Natural products will continue to be important in three areas of drug discovery: as targets for production by biotechnology as a source of new lead compounds of novel chemical structure and as the active ingredients of useful treatments derived from traditional systems. Biotechnology will contribute more new natural products for medicinal use. Plants provide a fertile source of natural products many of which are clinically important medicinal agents. Natural products have traditionally provided most of the drugs in use. Despite the achievements of synthetic chemistry and the advances towards rational drug design, natural products continue to be essential in providing medicinal compounds and as starting points for the development of synthetic analogues. With the increasing power of screening programs and the increasing interest in the reservoir of untested natural products, many future drug developments will be based, at least in part, on natural products. The major contents of the book are plant products produced in cell culture, application of genetic engineering to the production of pharmaceuticals, anti transpirants and plant growth regulators based, the potential and the problems of marine natural products, marine sterols, plants as a source of anti-inflammatory substances, anti hepatotoxic principles in oriental medicinal plants, immune stimulants of fungi and higher plants, amanita muscaria in medicinal chemistry, ergot alkaloids and their derivatives in medicinal chemistry and therapy, development of drugs from cannabinoids, etc. This book contains development of new drugs from plants, work on some Thai medicinal plants, plant growth based on Jasmonates, marine sterols, bleomycin and its derivatives, drugs from cannabinoids, bioactive compounds from nature, fungi and higher plants, biological active compounds from British Marine, microbial phytotoxins as herbicides and many

more. This book will be very helpful to its readers, upcoming entrepreneurs, scientists, existing industries, technical institutions, druggist etc.

# Handbook on Milk and Milk Proteins

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI241

**Pages:** 448

**ISBN:** 9788178331485

**Price:** Rs. 1,275.00 US\$ 33.95

Proteins play an important role in nutrition, taste, allergies, texture, structure, processing and yield performance. In the food industry, proteins are a key element of our diet and an important ingredient for food technologists. The total protein component of milk is composed of numerous specific proteins. Isolated milk protein products represent an important and valuable source of protein ingredients due to their recognized superior nutritional, organoleptic and functional properties. Milk protein is a rich source of essential amino acids and they have been the subject of intensive research for an effort to unravel their molecular structure and interactions, relationship between structure and functional attributes, interactions of proteins during processing and, more recently, their physiological functions. Free fatty acids (FFA) in fresh milk normally amount to less than 1% of the total milk fat, yet they are important because of their effect on milk flavour. Now a day, the processing of milk is part of a highly organized and controlled dairy industry, which produces and markets a multitude of dairy products. Functional milk proteins are perfectly suited for use in the dairy sector of food production and the modern food processing industry is placing more and more emphasis upon the utilization of protein ingredients to provide specific functional properties to a wide range of formulated foods. In recent years, there has been a great deal of progress in the understanding and management of milk proteins across the production chain. Some of the fundamentals of the book are surface tension of milk, lactose chemistry, milk proteins, phosphorylation of milk proteins, comparative aspects of milk proteins, utilization of milk proteins, heat stability of milks, heat stability of homogenized concentrated milk, lysinoalanine in milk and milk products, heat coagulation of type a milk, syneresis of heated milk, fatty acids in milk, milk gel assembly, mechanical agitation of milk, natural, leucocyte and bacterial milk, grass and legume diets and milk production. This book provides a complete overview and offers insights into topics for more in-depth reading on milk and milk proteins. The book covers chapters on milk proteins, biosynthesis & secretion of milk proteins, utilization, types of milk proteins, phosphorylation, milk glycoproteins and many more. It is hoped that this book will be very helpful to all its readers, students, new entrepreneurs, food technologist,

technical institution and scientists.

**India Active Pharmaceutical Ingredient (API) Market, Growth Rate, Covid-19 Impact, Economic Impact, Size, Share, Trend, Drivers, Competitive Landscape, Opportunity, Forecast upto 2027**



**Author:** NPCS Team

**Format:** Paperback

**Book Code:** NI320

**Pages:** 120

**ISBN:** 9788194737902

**Price:** Rs. 69,030.00 US\$ 1,800.00

India Active Pharmaceutical Ingredient (API) Market, Growth Rate, Covid-19 Impact, Economic Impact, Size, Share, Trend, Drivers, Competitive Landscape, Opportunity, Limitations, Technological Landscape, Regulatory Framework, PESTEL Analysis, PORTER's Analysis, Forecast upto 2027 Market By Manufacturing Process (Captive Manufacturing, Contract Manufacturing), By Type of Synthesis (Synthetic, Biotech), By API Formulation (Generic API, Innovative API), By Application (Cardiovascular Disease & Hematopoietic System, Central Nervous System, Anti-infectives, Respiratory, Gastrointestinal Disorders, Urology, and Others and By Region (North India, South India, West India, and East India) The India API market is expected to drive owing to the R&D activities and surge in the incidence of chronic disease The India API market projected to reach USD 27.49 billion at a significant CAGR of over 10.23% during the forecasted period of 2020-2027. Due to the rising upgradation of technology across India and the growing incidence of hereditary cardiac disease, it is further projected to accelerate the API market at a significant rate across the country. Furthermore, the propelling focus on precision medicine is predicted to accelerate the India active pharmaceutical ingredient market. Moreover, the use of drug development techniques focused on Artificial Intelligence further expected to boost the market. Additionally, strategic outsourcing enables enterprises to rely on their core competencies, contributing to improved efficiency, which is anticipated to fuel India's API market. Furthermore, the rising demand for biosimilars across India is predicted to drive the market at a considerable rate. However, the lack of skilled labor is predicted to challenge the growth of the market. Additionally, the increasing penetration of counterfeit drugs further projected to hinder the Indian market's growth substantially.

Manufacturing Process Overview in the India API Market Based on the manufacturing process, the India API market segregated into Captive Manufacturing and Contract Manufacturing. The Captive Manufacturing segment is predicted to hold the largest share during the forecasted period of 2020-2027 across the country. It is attributed to the proper manufacturing and strong capitalization of raw materials, which is estimated to boost the India API market significantly. In addition, manufacturing technologies favor in-house production of innovative products to take advantage of the economic opportunities and avoid the proliferation of technologies, which is further predicted to accelerate the market.

Type of Synthesis Overview in the India API Market Based on the type of synthesis, the India API market is segregated into Synthetic and Biotech. The biotech segment is

estimated to have the fastest growth rate during the forecasted period of 2020-2027 owing to the propelling technological advancement in the manufacturing process. Additionally, the increasing demand for the therapeutic and diagnostic solution on Red Biotechnology concepts, recombinant, and DNA sequencing technology is anticipated to boost the market. API Formulation Overview in the India API Market Based on the API Formulation, the India API market is categorized into Generic API and Innovative API. The Generic API segment is predicted to hold the largest share over the forecasted period of 2020-2027 across the country. It is attributed to the patent expiry of labeled molecules, which is expected to drive the market at a considerable growth rate. In addition, the decreased in the cost of the generic drug is further projected to fuel the India API market. However, the Innovative API segment is estimated to have a significant growth rate during the forecasted period by 2027 due to the presence of favorable government regulations in the research and development of drugs.

Application Overview in the India API Market Based on the Application, the India API market is classified into Anti-infectives, Cardiovascular and Hematopoietic System, Central nervous system, Respiratory, Gastrointestinal Disorders, Urology, and Others. The Cardiovascular and Hematopoietic System segment is expected to hold significant market share in API market over the forecasted period of 2020-2027 across the country due to the increasing prevalence of cardiovascular diseases coupled with the incidence surge of obesity. In addition, the variation in lifestyle has increased the incidence of obesity is further predicted to drive the segment's market. However, the Central nervous system segment is expected to have a considerable growth rate during the forecasted period by 2027 across the country. It is due to the increasing emphasis on early diagnosis & treatment, which is predicted to fuel the market. Additionally, the growing prevalence of neurological diseases and rising funding for neurological diagnostics is estimated to improve the market significantly.

Regional Overview in the India API Market By geography, the India API market segmented into North India, South India, West India, and East India. The West India region is projected to hold the largest share during the forecasted period of 2020-2027 owing to technological advancement. In addition, rapidly evolving healthcare facilities and growing healthcare budgets are further anticipated to propel the India API market. Furthermore, the availability of affordable labor across the region is expected to accelerate the region's market.

India API Market: Competitive Landscape Companies such as Dr. Reddy's Laboratories Ltd., Aurobindo Pharma Limited, Cipla Limited, Sun Pharmaceutical Industries Limited, GlaxoSmithKline Pharmaceuticals Ltd, Indoco Remedies Ltd., Piramal Enterprises Ltd., Teva Pharmaceutical & Chemical Industries India Pvt. Ltd., Sri Krishna Pharmaceuticals Limited, Pan Drugs Limited, and Other Prominent Players are the key players in the India API market. About Us: NIIR PROJECT

CONSULTANCY SERVICES (NPCS), an ISO 9001:2015 company is one of the leading reliable names in industrial world for providing one of the most comprehensive suites of technical consulting services. We at NPCS are dedicated with passion and enthusiasm for helping young entrepreneurs is a real encouragement to proceed with a business start-up right from providing basic information to technology evaluation, sourcing and assimilation of detailed project reports, market survey studies and research through our advanced Industrial, Business and Commercial Databases. NPCS is a well-known technical consultancy providing focused services and we have been following stringent system and procedure to ensure only top quality strictly in conformity with delivering the needs of our clients in this rapidly growing & changing market. We have a full fledged of highly qualified Technical Consultants, Engineers, Economist and Technologists specialized in various disciplines and we take great pride in working as a team, and share the common goal of exceeding excellence. Our team is behind the success of many clients in their investment. Over the years, NPCS has become a well-known name in the industrial world for delivering a wealth of technical services and solutions to clients, both large and small. We provide the services through comprehensive knowledge of equipment and practices through our excellent team at a very economical price. Tags  
#MarketResearchReports #MarketResearch #IndustryTrends  
#IndustryDemands #ActivePharmaceuticalIngredient #API  
#pharmaceutical #pharmaceuticalindustry #NPCS  
#projectconsultancy #businessconsultancy #apimarket  
#chemicalapimarket #biotechapimarket #highpotencyapi  
#marketforecast

# **India Vacuum Blood Collection Tube Market - Industry Size, Share, Trends, Analysis and Forecasts to 2027**

**Author:** Ajay Kumar Gupta

**Format:** Paperback

**Book Code:** NI323

**Pages:** 113

**ISBN:** 9788195075515

**Price:** Rs. 129,800.00 **US\$** 3,000.00

The India Vacuum Blood Collection Tube Market is expected to drive owing to technological advancement coupled with R&D activities across the country. The vacuum blood collection tube market reached USD 71.09 million in 2019 and is likely to reach USD 160.87 million by the end of 2027 by registering a 10.82 % CAGR across India. It is attributed to the propelling incidence of infectious diseases, which is anticipated to boost the market. Contagious diseases have made the most significant contribution to any cause to hospital admissions. In recent years, emerging and re-emerging infectious diseases in developed countries, including India, are presenting a public health danger. Additionally, the need for blood tests to distinguish different diseases using blood specimens is essential. In order to collect and preserve blood for processing, a vacuum blood collecting tube is used. The advancement of the vacuum blood collection tube industry depends on the needs and alternatives required for blood storage. The demand for vacuum blood collecting tubes is being powered by government subsidiaries and healthcare, which are expected to drive the market. However, the lack of skilled personnel & risk associated with blood transfusion is predicted to create an obstacle in the market's growth. In addition, the low popularity of vacuum blood collection tubes across India is likely to hinder the market growth over the forecasted period of 2020-2027.

**Product Segmental Overview in the India Vacuum Blood Collection Tube Market Based on Product,** the market is segmented into Gel & Clot Activator Tube, Glucose Tubes, Heparin Tubes, EDTA Tubes, Serum Separating Tubes, and Others. The EDTA Tubes segment is dominating the market during the forecasted period of 2020-2027. EDTA stands for Ethylenediaminetetraacetic acid. By binding calcium into the blood and preventing the blood from clotting, EDTA works. As the anticoagulant of choice for hematological research, EDTA has been prescribed because it ensures the best protection of cellular components and blood cell morphology.

**Material Segmental Analysis Based on Material,** the market is segmented into Polypropylene, PET, and Tempered Glass. The Polypropylene segment is dominating the market during the forecasted period of 2020-2027. Polypropylene is inexpensive to purchase, even in larger quantities, which is likely to fuel the market at a considerable rate. Additionally, they have a relatively low level of friction when polypropylene tubes are positioned side by side, which means very low energy levels are created when the tubes are rubbed together. Polypropylene is

particularly resistant to moisture and certain acids and alkali corrosion, which is predicted to boost the market over the forecasted period. Application Segmental Analysis Based on Application, the market is segmented into Blood Routine Examination, Coagulation Testing, Biochemical Test, and Others. The Blood Routine Examination segment is dominating the market during the forecasted period of 2020-2027. It is due to the propelling prevalence of lifestyle diseases, which is estimated to boost the market. However, the Coagulation Testing segment is expected to have the fastest growth rate across India. End-User Segmental Analysis Based on End-User, the market is segmented into hospitals, Clinics, Pathology Laboratories, and Others. The Hospital segment is dominating the market during the forecasted period of 2020-2027. It is attributed to the rising prevalence of infectious diseases, and demand for blood processing equipment and instruments in medical facilities has been ensured by the increase in the number of emergency cases, as well as for C-sections and organ transplants. However, the Pathology Laboratories segment is likely to have a considerable growth rate over the forecasted period of 2020-2027. Regional Overview in the India Vacuum Blood Collection Tube Market By geography, the India Vacuum Blood Collection Tube Market segmented into North India, South India, West India, and East India. The North India vacuum blood collection tube market is predicted to grow significantly during the forecasted period of 2020-2027. It is attributed to the well-developed healthcare infrastructure across the region, which is estimated to propel the market. Additionally, the mounting number of blood donation activities coupled with the presence of leading market players across the region is likely to fuel the market. India Vacuum Blood Collection Tube Market: Competitive Landscape Companies such as Becton, Dickinson, and Company, Narang Medical Limited, CML Biotech, Terumo Corporation, Bio – X, Labtech Disposables, Sunphoria Ltd., Greiner Bio-One International, Biosigma, Hebei Xinle Sci &Tech Co. Ltd., Medtronic plc., and Other Prominent Players are the key players in the India Vacuum Blood Collection Tube Market.

# Handbook on Active Pharmaceutical Ingredients (API), Drugs & Pharmaceutical Products

**Author:** Ashish Dey

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Handbook on Active Pharmaceutical Ingredients (API), Drugs & Pharmaceutical Products(Paracetamol, Aspirin, IV Fluids, Ointment, Metronidazole, Liquid Glucose, Surgical Cotton, Syrup, Tablet, Excipients, Pharmaceutical Salts with Manufacturing Process, Machinery Equipment Details and Factory Layout) An active pharmaceutical ingredient (API) is the active substance in a pharmaceutical drug that produces its therapeutic effect. APIs can be synthetic chemicals or natural sources such as plant extracts. APIs are components of drugs, the majority of which are manufactured by pharmaceutical companies. Drugs, on the other hand, are dosage forms that contain an API and are distributed to patients for use.

Pharmaceutical products are any compounds used in the medical industry to diagnose, treat, cure, or prevent diseases. These products are typically formulated as drugs, vaccines, biologics, and medical devices, which can either be prescribed by a doctor or bought over-the-counter (OTC). They come in various forms such as tablets, capsules, syrups, ointments, creams, solutions, suspensions, implants, patches, and powders. Pharmaceutical products are manufactured under strict guidelines and must adhere to various regulations such as Good Manufacturing Practices (GMP). The global market for Active Pharmaceutical Ingredients (API), Drugs & Pharmaceutical Products is expected to grow rapidly over the next few years. This growth will be driven by rising demand for improved healthcare services and an increasing number of new treatments. The market for active pharmaceutical ingredients is anticipated to rise at a CAGR of 5.90%. The development in the production of active pharmaceutical ingredients (APIs) as well as the increased incidence of chronic diseases including cancer and cardiovascular conditions are both responsible for the expansion. Government regulations that are supportive of API manufacturing, together with shifting geopolitical conditions, are accelerating market expansion. The pharmaceutical products market has grown steadily in recent years, and is expected to continue to do so. This growth is driven by a number of factors, including increased demand for new drugs, changing disease patterns and aging populations in some countries, as well as the emergence of innovative drugs and technologies. The market is being shaped by the rise of emerging economies and their increasing healthcare needs. This has led to increased investment in drug research and development, as well as an

Pharmaceutical products are any compounds used in the medical industry to diagnose, treat, cure, or prevent diseases. These products are typically formulated as drugs, vaccines, biologics, and medical devices, which can either be prescribed by a doctor or bought over-the-counter (OTC). They come in various forms such as tablets, capsules, syrups, ointments, creams, solutions, suspensions, implants, patches, and powders. Pharmaceutical products are manufactured under strict guidelines and must adhere to various regulations such as Good Manufacturing Practices (GMP). The global market for Active Pharmaceutical Ingredients (API), Drugs & Pharmaceutical Products is expected to grow rapidly over the next few years. This growth will be driven by rising demand for improved healthcare services and an increasing number of new treatments. The market for active pharmaceutical ingredients is anticipated to rise at a CAGR of 5.90%. The development in the production of active pharmaceutical ingredients (APIs) as well as the increased incidence of chronic diseases including cancer and cardiovascular conditions are both responsible for the expansion. Government regulations that are supportive of API manufacturing, together with shifting geopolitical conditions, are accelerating market expansion. The pharmaceutical products market has grown steadily in recent years, and is expected to continue to do so. This growth is driven by a number of factors, including increased demand for new drugs, changing disease patterns and aging populations in some countries, as well as the emergence of innovative drugs and technologies. The market is being shaped by the rise of emerging economies and their increasing healthcare needs. This has led to increased investment in drug research and development, as well as an



increase in the number of multinational companies setting up operations in various countries. Furthermore, generic drugs are becoming increasingly popular as a way of reducing healthcare costs. Generic drugs are copies of brand-name drugs, which are manufactured by generic drug companies. They offer an effective alternative to branded drugs and are often much cheaper. As a result, generic drugs are increasingly being used in countries across the world, leading to an increase in the global pharmaceutical products market. Overall, the global market for pharmaceutical products and drugs are set to continue to grow in the coming years. New products, innovative technologies and emerging markets will drive growth, and this will bring both opportunities and challenges for the industry. The books' main subjects include Active Pharmaceutical Ingredients (API), Drugs, Aspirin, Paracetamol, IV Fluids, Ointment, Metronidazole, Liquid Glucose, Surgical Cotton, Syrup, Tablet, Excipients, Pharmaceutical Salts with formulations, factory layout, and images of machinery with contact information for suppliers. A thorough guide to manufacturing and business operations in the Active Pharmaceutical Ingredients (API), Drugs & Pharmaceutical Products industry. The Active Pharmaceutical Ingredients (API), Drugs & Pharmaceutical Products manufacturing industry is full with opportunity for producers, traders, and business owners, and this book is your one-stop resource for all the information you require. The only complete manual on the creation of commercial Active Pharmaceutical Ingredients (API), medications, and pharmaceutical products is this one. It offers a wealth of information on how to do things, from concept through equipment acquisition.

# India Menthol Crystal Market

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The India menthol crystal market reached USD 111.55 million in 2021 due to increasing demand for natural-based products from the cosmetics and pharmaceutical industry. The India menthol crystal market was valued at USD 111.55 million in 2021 and is likely to grow with a CAGR of 6.71%, in value terms, over the forecast period 2022-2028 and is expected to reach USD 172.97 million by 2028. The growth of growth is attributed to the rapid expansion of pharmaceutical companies along with the surge in demand for natural menthol crystals in pharmaceutical industries, rising usage of menthol crystals in cough syrups, analgesic balms, and foot sprays, and growing demand for menthol crystals among the geriatric population to treat used to treat minor aches and pains of the muscles or joints such as arthritis, backache, and sprains. Additionally, the rapid pace of urbanization in India, improving living standards, and rising disposable income leads to demand for natural plant-based health and cosmetics are expected to fuel the growth of India menthol crystal market in India. Moreover, a surge in demand for natural menthol crystals in the food and beverages industries as a flavor and fragrance agent in food such as chewing gums, candy, confectionery and flavor and fragrance agents in a beverage are influencing the India menthol crystal market. These menthol crystals are widely used as a denaturant, flavoring agent, and fragrance ingredient in the formulation of a wide variety of cosmetics and personal care products such as soap, bath, aqueous cream, Talcum Powder etc. The surge in the usage of menthol crystal in various end industries will propel the demand for menthol crystal in the upcoming years. Type Overview in the India Menthol Crystal Market Based on the type, the India menthol crystal market is categorized into natural menthol crystal and synthetic menthol crystal. The natural menthol crystal segment captured the highest market share with 72.78% in 2021 and is expected to generate USD 128.07 million in revenue by 2028. The growth of the segment is attributed to the surge in demand for natural menthol crystal as raw materials for manufacturing cosmetic products and used as a flavor and cooling agent in cough medicines and Lozenges. Application Segmental Analysis Based on the application, the India menthol crystal market is segregated into pharmaceutical formulations, cosmetics, flavoring industries, and others. The

pharmaceutical formulations segment accounted for the highest market share with 71.70 % in 2021 and is projected to reach USD 121.36 million by 2028. It is due to menthol crystal used in pharmaceutical formulations for its analgesic and cooling effects and used as a flavoring agent for toothpaste, hygiene products, chewing gum, etc. Menthol crystals have effective antispasmodic properties, are highly potent in relaxing muscles and are widely used to treat minor aches & pains of the muscles/joints (such as arthritis, backache, sprains). Regional Overview in the India Menthol Crystal Market By region, the India Menthol Crystal market is segmented into North India, South India, West India, and East India. North India captured the largest market share with 36.72% in 2021 and is projected to generate revenue of USD 61.96 million by 2025 due to North India's states being the major producer of menthol crystal in India. Menthol crystals in India are mostly grown in states like Uttar Pradesh, Haryana, Bihar, and other parts of India. Uttar Pradesh is the largest producer of Mentha oil, accounting for 90% of the country's total Mentha production, followed by Punjab, Haryana, Bihar, and Madhya Pradesh. India Menthol Crystal Market: Competitive Landscape Companies include Takasago International Corporation, Expo Essential Oils, N.S. Mint Products Pvt. Ltd., K.M. Chemicals, A.G. Industries, Bhagat Aromatics Ltd, Silverline Chemicals, Hindustan Mint & Agro Products Pvt., Neeru Menthol Private Limited, Vinayak Ingredients (INDIA) Pvt. Ltd. are the key players in the India menthol crystal market. About Us: NPCCS is a research, advisory, and analytics company. We have a specialized team of consultants catering to a wide range of verticals, which include Consumer Goods & Retail, Healthcare, ICT, Chemical, BFSI, and many others. In a very short span of time, we have expanded beyond the basic services to advanced research services such as Financial Modelling, Supply & Demand Analysis, Pricing Analysis, Competitive Analysis, and various other services which not only facilitates the senior executives across industries but giants who have established names in different industry verticals. Through our indispensable business insights, we are able to help our clients to achieve the mission-critical tasks which facilitate them to build the organizations of tomorrow.

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**NIIR PROJECT CONSULTANCY SERVICES** , 106-E, Kamla Nagar, New Delhi-110007, India. **Email:** [npcs.india@gmail.com](mailto:npcs.india@gmail.com) **Website:** [NIIR.org](http://NIIR.org)

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