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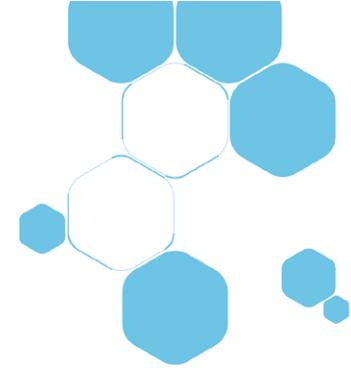
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SUNSON INDUSTRY GROUP CO.,LTD.

SUNSON GROUP BRAND PROFILE



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SUNSON Industry Group Co., Ltd was established in 1996, which was the first local company to produce cellulase by submerged fermentation in China. SUNSON Group is a full functioning enzyme company covering R&D, production and sales. It has 9 business divisions, 1 Strain R&D Center, 1 Application Technology Center, 1 Technical Service Center and 1 Production Technology Center. The company has built 2 modern production factories with submerged fermentation and ultrafiltration extraction technology. With more than twenties years progress, Sunson has successfully developed series of industrial enzyme products, widely applied in feed, brewing, baking, plant extract, leather, alcohol, textile, and so on. Sunson has become a famous brand in enzyme field by its remarkable R&D capability, production capacity and outstanding enzyme products.

SUNSON is the member of China Biotech Fermentation Industry Association (CBFIA), and member of Enzyme Preparation Branch of CBFIA. SUNSON was honored as the Key Enterprise of China Enzyme Industry by China Fermentation Industry Association, and was the first enzyme manufacturer certified with ISO 22000 Food Safety Management System in China. It was also certified with KOSHER and HALAL, ECOCERT Organic Farming Europe, FSSC22000 Food Safety Management System, ISO9001 Quality Management System and FAMI-QS. Sunson's products have been exported to more than 40 countries or regions and widely accepted by our customers worldwide.

Looking forward, with the mission to be the world leading enzyme company, Sunson will continue, with its spirit of truth-seeking and pragmatism, entrepreneurship and constant innovation, and the mindset of striving for excellence in product development, to provide green, healthy, ecofriendly, highly efficient and sustainable biological solutions, contributing to a sustainable world.

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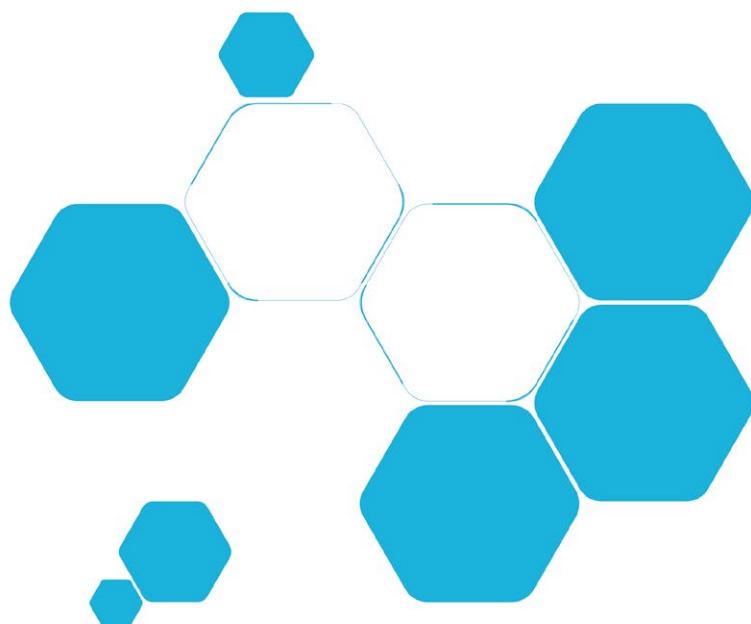
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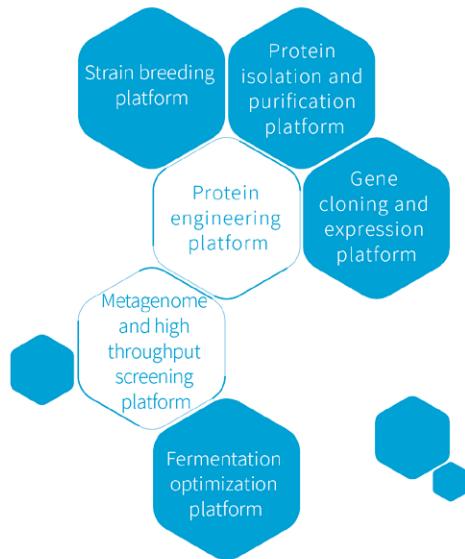


Strain R&D Center

Sunson Group has been actively cooperating with scientific institutions and relevant associations both in China and abroad. A joint lab has been set up with Engineering Research Center of Industrial Microbiology of the Ministry of Education. SUNSON Strain R&D Center focuses on strain development, which is supported by a very innovative and high-performing group of high-level scientists, engineers and lab assistants, most of them holding doctorate, master degree and/or senior engineer certificate.

The following platforms have been set up in the Center:

- Strain breeding platform
- Metagenome and high throughput screening platform
- Protein isolation and purification platform
- Gene cloning and expression platform
- Fermentation optimization platform
- Protein engineering platform



Application Technology Center

SUNSON Application & Development Center is well equipped with laboratory instruments, such as high-power microscope, thermostatic oscillator, Kjeldahl Analyzer, high speed centrifuge, vacuum freeze drier, protein electrophoresis apparatus and high-pressure liquid chromatography (HPLC), and so on. Based on the market and customers' needs, the center carries out research and development as well as the optimization of new enzyme products to meet the market needs, and also provide customers with professional technical services.



Application Service Center

To improve service, Sunson set up a separate Technical Service Center, where a group of professional and very experienced enzyme experts offer services for our customers in food, feed, textile, pulp & paper as well as detergent industry, provide professional pre-sales consultancy and after-sales technical support, and develop tailor-made solutions to address customer's issues through customization.

03



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SUNSON • Dedication only to enzymes •

Production Technology Center

Sunson Production Technology Center is run by a very experienced team coming from relevant backgrounds. There are various sophisticated facilities including 4 automated experimental fermenters. The Center undertakes the verification of strain bred from Strain Development Center, scale-up trials and optimization of existing production. By compilation, implementation and improvement of SOPs and review of production records against SOPs the Center ensures high-standard production in real practice.

Industry	Sunson's product
 Starch and sugar processing	Enzyme complexes, α -amylase, glucoamylase and pslulanase
 Fuel Ethanol and Beverage Alcohol	α -amylase, glucoamylase, acid protease and xylanase
 Brewing	Brewing enzyme complex, α -amylase, glucoamylase, neutral protease, papain, proline-specific endoprotease, xylanase and β -glucanase
 Amino acid and organic acid fermentation	α -amylase, glucoamylase and glucose oxidase
 MSG, soya sauce, vinegar fermentation	α -amylase, glucoamylase, acid protease, α -acetolactate decarboxylase
 Plant extract	Enzyme complex for plant extract, coffee bean processing enzyme, cellulase, xylanase, β -glucanase, pectinase, protease and amylase
 Juice and Wine	Enzyme complex series for the processing of apple juice, pear juice and durian juice, enzyme complex for wine, depectinization enzyme, mashing enzyme
 Juice and Wine	Transglutaminase (TG), lactase, alkaline protease, neutral protease, acid protease, papain, flavorzyme
 Vegetable protein hydrolysis	Alkaline protease, neutral protease, acid protease, papain, flavorzyme
 Baking and flour correction	Baking enzyme complex, maltogenic amylase, glucose oxidase, α -amylase, xylanase
 Preserved fruits	Enzymes for preserved sweet potato, enzymes for preserved ginger.

Baking Enzymes

SUNSON's Food and Baking Business Division focuses on solutions for flour and flour product processing industries. We look into different segments, identify the needs and develop solutions accordingly. We aim not only to help you bake satisfactory products but also to have a satisfactory business.

complex baking enzyme, mannanase, glucose oxidase, lipase, α -amylase, xylanase, β -glucanase, phospholipase.

- Speed up dough fermentation and shorten the fermentation time;
- Increase crumb softness and product volume;
- Improve crumb whiteness and surface shininess of steamed bread and reduce the shrinkage of steamed bread;
- Improve the crust color and overall quality of the bread.

06

SUNSON • dedication only to enzymes •

Juice & Wine Enzymes

SUNSON's Juice and Wine Business Division was founded in 2000 and grown up into an independent company in 2004. Our solution has been developed based on deep understanding of juice and wine processing as well as the challenges the industry is facing. These solutions are welcome in the market. We have stable business with the key players on the market. Our Products has been exported to many countries including the United States and Vietnam.

Major products

Enzyme complex for apple juice, Enzyme complex for pear juice, Enzyme complex for wine, pulp enzyme, membrane cleaning enzyme, filter aid enzyme, pectinase complex, etc.

- Increase juice yield and make best use of raw material;
- Degrade pectin and polysaccharide;
- Reduce viscosity and improve UF flux rate;
- Improve juice transparency and stability;
- Clean and recover UF membrane.



Plant Extract Enzymes

SUNSON's Plant Extract Business Division integrating R&D, sales and service functions was founded in 2004. SUNSON have won high recognition in the industry for the high quality and well-performing products as well as professional service. We have been committed to constantly developing innovative solutions based on industry needs and helping our customers to extract more business and profits.

Major products

Complex plant extract enzyme, enzyme for processing of fresh coffee beans, Cellulase, Xylanase, β -glucanase, Pectinase, Protease, α -amylase, etc.

Benefits

- Disrupt plant cell wall, increase recovery of target components;
- Clarify plant extract, reduce viscosity and improve filtration;
- Substitute acid or alkali chemicals to reduce environmental pollution.





Enzymes for meat, egg and milk products processing

Major products

Transglutaminase (TGase), lactase, alcalase, neutral protease, acid protease, papain, flavorzyme

- TGase catalyzes the cross-linking between protein molecules and is widely applied in bacon, sausages, meat balls, frozen surimi, fish eggs, cheese, yoghurt and many other foods.
- Lactase hydrolyzes lactose to produce glucose and galactose and is often used in the production of low lactose dairy products like milk and ice cream.
- Various proteases are used alone or in combination in the production of meat extract, peptone, peptide, etc.

Benefits

Brewing Enzymes

SUNSON's Brewing Business Division has established long-term partnerships with many giant brewing groups, and our products have gained high market share in domestic market.

SUNSON is the first enzymes manufacturer who provide complex enzyme for beer in China. Quality, innovation and customer orientation are our secret for success. We offer more than 20 brewing solutions to satisfy our customer's needs. We are always ready to develop tailor-made solutions to best address our customer's concerns and brew a profitable business together with our customers.

Major products

Enzyme complex SBM-002, α -amylase from fungus, glucoamylase, neutral protease, papain, proline-specific endoprotease, xylanase, β -glucanase, etc.

Benefits

- Reduce wort viscosity, improve filtration speed, improve wort brightness, improve the filtration performance;
- Extract yield improvement and cost saving;
- Brewhouse efficiency improvement, higher fermentability and beer yield;
- Better wort FAN level and beer colloidal stability.



Feed Enzymes

SUNSON's Feed Business Division was inaugurated in 1996 and now has gained the leading position in this business segment on domestic market. By following the latest developments in feed industry Sunson constantly offers new solutions to the market by systematic studies. Today's main offerings from Sunson include the following series: single enzyme series, multi-purpose enzyme complex series, specific enzyme complex series and dietary supplement enzyme complex series.

Major products

Complex enzymes:

Enzyme complex for Miscellaneous, Enzyme complex for Poultry, Enzyme complex for Wheat-based feed, Enzyme complex for cow, Enzyme complex for cattle and sheep, Enzyme complex for Silage, Enzyme complex for aquaculture, Enzyme complex for swine, Enzyme complex for conventional feed, meal based feed.

Benefits

- Supplement endogenous enzyme;
- Degrade the anti-nutritional factors in feed;
- Improve the digestibility of feed materials;
- Improve the microflora in the digestive tracts;
- Improve animal performance.



Leather Enzymes

SUNSON's Leather Business division was founded in 2003. This function maintains close cooperation with the world class enzyme manufacturers and gets well connected to the industry. Through its professional R&D, production and sales team the function offers series of products covering different applications along leather processing. These products have received very positive feedbacks from the market.

Major products

Benefits

Soaking enzyme, liming enzyme, alkaline softening enzyme, acid softening enzyme, alkaline lipase, acid lipase, decomposing enzyme, etc.

- Help remove the non-structural proteins and dirt, promote soaking process, and restores the expanded state.
- Effectively remove interstitial substances of fur and skin scale without damaging the grain surface.
- Effectively improve the softness and fullness of leather and increase leather yield.
- The product effectively remove dirt and fat and improve the softness and fullness of the leather.

Textile Enzymes

SUNSON's Textile Business is managed by two companies, Guangzhou DYDI biological Preparation Co., Ltd. and Shanghai DYDI Industrial Development Co., Ltd., who are joint adventures founded in 2001 between SUNSON and DYDI, a German Company specialized in textile enzyme R&D and production. We have been paying close attention to the latest developments in textile enzymes and maintaining in-depth exchanges and cooperation with world-renowned enzyme manufactures that come from Germany and the United States.

We are committed to bringing innovative textile solutions to the market with good product stability and performance by combining world-class production and application technologies to best satisfy our customer needs.

Major products

- Cellulase CN-1600, Catalase CAT-400
- Finished Enzyme power V88 for jeans washing
- Neutral Cellulase TM90 for jeans washing
- Neutral Cellulase V999 for jeans washing

Benefits

- Lower treatment temperature and energy saving;
- Replacement of pumice in jeans washing, single yarn drill polishing;
- Nice stonewashed effect, aging, softening, peach skin effect on cotton fiber;
- Color fastening.

Pulp & Paper Solutions

Today's Pulp & Paper industry is facing with more and more environmental and cost pressure. Sunson Pulp & Paper Business Division is committed to developing eco-friendly and cost-effective enzyme solutions that lead to the reduced energy and water consumption, less use of harmful chemicals, improve paper machine efficiency and paper quality. Sunson would like to partner with you to jointly develop sustainable biological solutions to address the concerns of the whole industry and specific customers.

Major products

Beating enzyme, Water filtration enzyme, Sizing enzyme, Bleaching enzyme, Stickies control enzyme, Wood fiber softening enzyme, Chip treatment enzyme, Resin control enzyme

Benefits

- Reduce energy consumption and improve paper strength;
- Improve pulp drainage and reduce steam consumption;
- Reduce the deposition of stickies in the process of recycling paper pulp and improve the efficiency of paper machine operation;
- Eco-friendly solution reduces the use of chemicals.



Detergent solutions

Enzymatic washing solutions provide a better and more eco-friendly alternative to traditional chemical ones. Various enzymatic washing solutions adapted to laundry, medical cleaning, dishwashing and professional washings have demonstrated outstanding performance in cleaning effect, convenience and eco-friendliness. To satisfy the diversified needs Sunson Detergent Business Division devoted itself to developing professional solutions and helping our customers' business from good to great.

Major products

Linen specific enzyme complex, Low temperature linen detergent activator, alkaline protease, alkaline α -amylase, alkaline lipase, alkaline cellulase, alkaline mannosidase, multi-enzyme granulate, 4-in-1 liquid enzyme complex

Benefits

- A higher degree of stain removal, whiteness, and color and fabric care than traditional chemical ingredients. More efficient stain removal, whitening, color and fabric care.
- Reduction of surfactant usage and sodium tripolyphosphate.
- Eco-friendliness & bio-degradability.
- Cost competitive compared to traditional chemicals.



Single enzyme series

SUNSON's Single Enzyme Products take very important position among all products. According to different grades, these Single Activity Enzymes are classified into 3 categories: Food Grade Enzymes, Feed Grade Enzymes and Industrial Grade Enzymes, and they cover vast variety of industries and applications.

Food grade enzymes

Thermostable α -amylase, medium-temperature α -amylase, fungal- α -amylase, β -amylase, glucoamylase, pullulanase, maltogenic amylase, phytase, neutral cellulase, acid cellulase, hemicellulose, β -glucanase, neutral xylanase, acid xylanase, thermostable xylanase, cellobiase, pectinase, pectic lyase, tannase, dextranase, α -galactosidase, alkaline protease, neutral protease, acid protease, bromelain, papain, proline-specific endoprotease, aminopeptidase, glucose oxidase, catalase, laccase, lipase, phospholipase, glutamine transaminase, lactase, nuclease, α -acetolactate decarboxylase, etc.

Feed grade enzymes

Phytase, glucose oxidase, cellulase, β -glucanase, xylanase, mannanase, pectinase, medium-temperature α -amylase, glucoamylase, alkaline protease, neutral protease, acid protease, lipase, α -galactosidase, etc.

Industrial grade enzymes

Catalase, alkaline protease, neutral protease, acid protease, trypsin, pepsin, keratinase, neutral cellulase, acid cellulase, xylanase, mannanase, α -amylase, rhamnosidase, lipase, lysozyme, inulinase, etc.

Sales & service **network**

With decades of brilliant history and unprecedented growth, Sunson is determined to continue its journey, with market and customer orientation mindset and dedication, to bring outstanding enzyme products to the market that is closely related to our daily life by pioneering innovation, keep improving services, and provide professional solutions and tailor-made pre- and after-sales services to best satisfy each of our customers, keeping the pace with the times. Let's get connected via green and natural life concept.

Going forward, we are confident to create a bright future. Today, Sunson has set up 7 sales branches and more than 30 representative offices in 32 provinces, cities or autonomous regions. Its products have been directly exported to more than 30 countries or regions around the world. Sunson has now been well-recognized among the industry.

