



TIANFENG

SHENYANG TIANFENG BIOLOGICAL
PHARMACEUTICAL CO., LTD.

沈阳天峰生物制药有限公司

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PHARMACEUTICAL CO., LTD.

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高端磷脂全产业链生产商
磷脂应用技术方案服务商

High - end Phospholipids Full - Industry
Chain Manufacturer and Phospholipids
Application Technology Solution Provider

沈阳天峰生物制药有限公司

SHENYANGTIANFENG

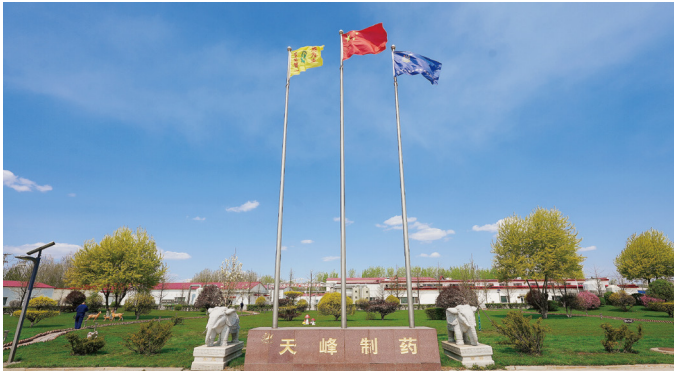
01 ABOUT US

关于我们

沈阳天峰生物制药有限公司于 2005 年成立, 位于中国·沈阳经济技术开发区, 占地面积 50,300 平方米。作为国家级高新技术企业, 公司专注于高端天然磷脂、生物转化磷脂及磷脂应用技术的研发与生产。凭借在技术研发和生产领域的积累, 公司获评辽宁省专精特新企业与瞪羚企业, 在磷脂行业形成了专业的发展优势。

2005 年
公司成立

50,300 m²
占地面积



公司坚持走产、学、研相结合道路, 同国内多家知名院校和专家学者合作, 围绕磷脂生产与应用技术进行创新开发。

拥有

- “辽宁省天然药物现代分离与工业化制备专业技术创新中心”
- “辽宁省天然活性物质工业化色谱制备工程技术中心”
- 沈阳市“天然活性物质工业化色谱制备公共服务平台”公共服务平台
- 核心分离技术“天然抗肿瘤原料药的大规模色谱制备关键技术研究与应用”荣获辽宁省科技成果二等奖及沈阳市科技成果一等奖。

通过ISO 9001质量管理体系与FSSC 22000食品安全管理体系认证, 并取得KOSHER与HALAL清真认证, 确保产品符合国际法规及多元市场的品质标准。



沈阳天峰始终将技术创新作为企业发展的核心驱动力, 聚焦高端磷脂领域的关键技术突破, 持续提升核心竞争力, 不断培育新质生产力, 探索出一条自主可控、质量引领的创新发展路径。



01 ABOUT US

Shenyang Tianfeng Biological Pharmaceutical Co., Ltd. was established in 2005 and is located in Shenyang Economic and Technological Development Zone, China, covering an area of 50,300 square meters. As a national high - tech enterprise, we focus on the research, development, and production of high-end natural Phospholipids, biotransformed Phospholipids, and Phospholipids application technologies. Thanks to the accumulation in technology research and production, our company has been recognized as a specialized, refined and innovative enterprise and a gazelle enterprise in Liaoning Province, forming a professional development advantage in the Phospholipids industry.

2005 Established

50,300 m²
Area



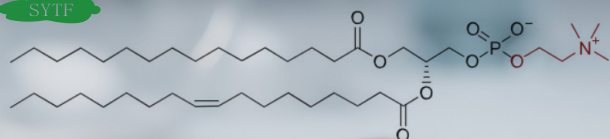
We adhere to the path of combining production, learning, and research, and cooperate with many well - known domestic universities, experts, to conduct innovative development around Phospholipids production and application technologies. We have public service platforms such as the "Liaoning Provincial Professional Technology Innovation Center for Modern Separation and Industrial Preparation of Natural Medicines", the "Liaoning Provincial Engineering Technology Center for Industrial Chromatographic Preparation of Natural Active Substances", and Shenyang's "Public Service Platform for Industrial Chromatographic Preparation of Natural Active Substances". The core separation technology, "Research and Application of Key Technologies for Large - Scale Chromatographic Preparation of Natural Antitumor Raw Materials", won the second - prize of Liaoning Provincial Scientific and Technological Achievements and the first - prize of Shenyang Scientific and Technological Achievements.

Our company has passed the ISO 9001 Quality Management System and FSSC 22000 Food Safety Management System certifications, and obtained KOSHER and HALAL halal certifications, ensuring that our products meet international regulations and quality standards in diverse markets.



Tianfeng always regards technological innovation as the core driving force for enterprise development, and focuses on key technological breakthroughs in the high - end Phospholipids field, continuously improves our core competitiveness, constantly cultivates new quality productivity, and has explored an innovative development path that is self - controllable and quality - oriented.





It is used to prepare liposomes and nano-emulsions, promoting the absorption of active ingredients. It can be also used as a moisturizing agent and antioxidant.



In food processing, it can be used as an emulsification agent, antioxidant, and flavoring agent, enhancing the stability of the system.

It can regulate blood lipids, protect the liver, and promote lipid metabolism. It is often used as an active ingredient in dietary nutritional supplements.



Its main components include

- phosphatidylcholine
- phosphatidylethanolamine, etc

It is widely used in food, dietary supplements, medicine, and other fields.

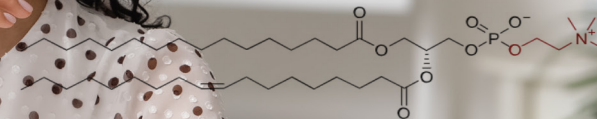
It has functions such as emulsification, metabolism regulation, and nerve function improvement. It is an important component of human cell membrane and is of great significance for maintaining physiological functions.



All products and services can be customized according to customers' needs.

Specification	Phosphatidylcholine (PC) Content	CAS Number
PC50	≥45.0%	8030-76-0
PC70	≥70.0%	8030-76-0
PC80	≥80.0%	8030-76-0

Specification	Phosphatidylcholine (PC) Content	CAS Number
PC90	≥90.0%	8030-76-0
PC94	≥94.0%	97281-47-5
PC98	≥98.0%	97281-47-5



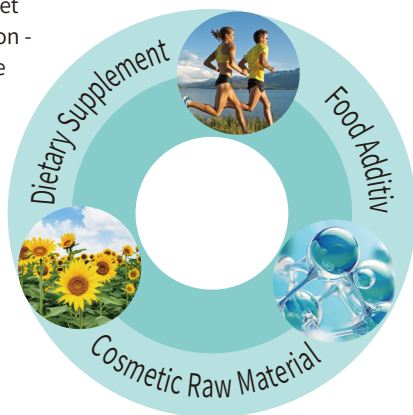
Applications

Dietary Supplement

It can be used as a lipid nutrient source in dietary supplements to meet market demands for natural, non-GMO, and allergen-free products.

Food Additive

Suitable for foods such as dairy products, plant - based beverages, and baked goods, it improves emulsification stability and taste, and has dual functions of antioxidant and nutrition.



Cosmetic Raw Material

It can be used as a construction base material for liposomes and emulsification systems, enhancing the permeability and stability of active substances, and helping to repair the skin barrier and improve skin feel.

Product Specifications

Specification	Phosphatidylcholine (PC) Content	CAS Number
PC50	≥45.0%	8030-76-0
PC70	≥70.0%	8030-76-0
PC90	≥90.0%	8030-76-0

NATURAL SUNFLOWER PHOSPHOLIPID

Natural Sunflower Phospholipid is a natural Phospholipid substance extracted from sunflower seeds. It is a light yellow or light brown waxy solid mass.

Its main components include

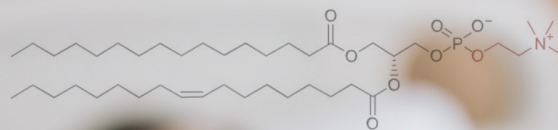
- phosphatidylcholine
- phosphatidylethanolamine

It is widely used in food, dietary supplements, cosmetics, and other fields.

It is friendly to people with soy allergies and has functions such as regulating blood lipids, protecting the liver, supporting the health of the brain and nervous system, improving skin conditions, and assisting in nutrient absorption and metabolism.



All products and services can be customized according to customers' needs.



Pharmaceutical Excipient

Widely used in special medical purpose formula foods (FSMP), infant formula powders, and functional beverages, it improves the stability of the emulsification system and the nutrient absorption rate, and complies with food regulations and standards in many countries.

Its main components include

- phosphatidylcholine
- phosphatidylethanolamine

It is a milky white or light yellow waxy solid mass and is widely used in medicine, dietary supplements, and cosmetics.

Cosmetic Raw Material

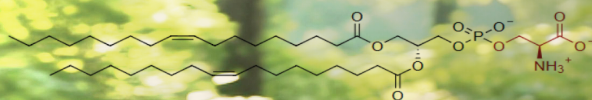
It is often used to construct systems such as liposomes and O/W emulsions, improving the encapsulation and stability of active ingredients. At the same time, it has membrane - structure affinity, which helps to repair the skin barrier and improve moisturizing performance and skin - feel.



All products and services can be customized according to customers' needs.

Product Specifications

Specification	Phosphatidylcholine (PC) Content	CAS Number
E80	≥80.0%	93685-90-6
E98	≥98.0%	97281-44-2



Phosphatidylserine from soy sources is suitable for consumers who pursue cost - effectiveness and mainstream certifications; phosphatidylserine from sunflower sources is free of soy allergens, making it suitable for vegetarians and people allergic to soy, meeting high - standard international market demands.



All products and services can be customized according to customers' needs.

Dietary Supplements

It has functions such as regulating neurotransmitters, enhancing synaptic transmission, and improving brain function. It is widely used in brain - health dietary supplement products for the elderly, students, and people under high stress to improve memory, relieve cognitive decline, and regulate emotions and stress responses.



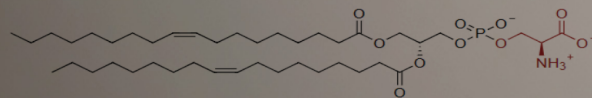
Functional Foods

It has been listed in the new food ingredient catalogs of many countries and is widely used in products such as yogurt, milk powder, cereal bars, and sports drinks.

Product Specifications

Soy Source		
Specification	Content (PS) %	CAS Number
PS20	≥20	51446-62-9
PS50	≥50~ 60	51446-62-9
PS70	≥70	51446-62-9

Sunflower Source		
Specification	Content (PS) %	CAS Number
PS20	≥20	51446-62-9
PS50	≥50~ 60	51446-62-9
PS70	≥70	51446-62-9



Application Fields

Hydrogenated Soya Phospholipid has good biocompatibility, moisturizing performance, and emulsifying performance. It is often used as an antioxidant, emulsifier, and moisturizer in cosmetics and skin - care products. It is commonly used in functional essences, creams, gels, repair masks, and medical skin - care products.



High - purity hydrogenated Soya Phospholipid can be used in special preparations such as liposomes, with good delivery stability. As a membrane material component of liposomes, it is used to encapsulate drugs, achieve targeted drug delivery, improve the efficacy of drugs, and reduce the toxic and side effects of drugs.

Hydrogenated Soya Phospholipid is a highly pure saturated Phospholipid obtained by partially or completely hydrogenating the unsaturated fatty acids in natural Soya Phospholipid.

- hydrogenated phosphatidylcholine (HPC)
- hydrogenated phosphatidylethanolamine (HPE)

As a semi - synthetic Phospholipid, hydrogenated Soya Phospholipid has high stability and good encapsulation performance. Compared with synthetic Phospholipid, it has obvious price advantages and is widely used in the preparation of liposome products in the cosmetics and pharmaceutical fields.

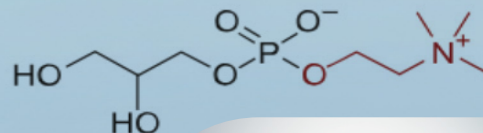


All products and services can be customized according to customers' needs.

Product Specifications

Specification	Content (HSPC) %	CAS Number
25H	≥25	92128-87-5
50H	≥50	92128-87-5
70H	≥70	92128-87-5

Specification	Content (HSPC) %	CAS Number
80H	≥80	92128-87-5
90H	≥90	97281-48-6



GLYCEROPHOSPHATIDYLCHOLINE

Glycerophosphatidylcholine (GPC) uses natural Soya Phospholipid as a substrate and retains the natural molecular configuration through biocatalytic transformation or chemical transformation technologies. It is a key intermediate in the Phospholipid metabolic pathway and a water-soluble small-molecule substance naturally present in the human body.

It has

- good brain-tissue penetration ability
- neuron affinity

The product is in the form of white or off-white crystalline powder, or colorless or light yellow transparent liquid, and is easily soluble in water. It is suitable for the development of high-end nutritional supplement formulas.



All products and services can be customized according to customers' needs.

Applications

Functional Foods

As an efficient choline precursor, GPC participates in the synthesis of acetylcholine and Phospholipid reconstruction, which can support nerve signal transmission, improve cognitive ability, and enhance brain metabolic function.

Clinical studies have shown that it has positive effects on cognitive decline in the elderly, improvement of learning ability in adolescents, and relief of brain fatigue.

It is widely used in functional foods related to brain health, mood management, and nerve nutrition.

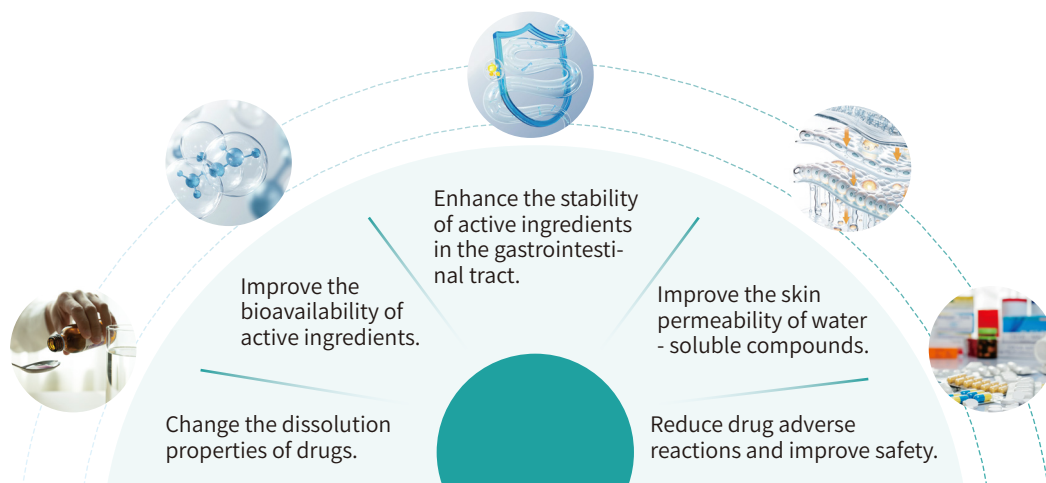
Product Specifications

Specification	Content (Based on Dried Product) %	CAS Number
85%	98~102	28319-77-9
98%	98~102	28319-77-9



PHOSPHOLIPID COMPLEXES

Technical Advantages



Technical Introduction

The Phospholipid complex technology forms stable complexes between plant extracts, natural active substances, and Phospholipid. The active ingredients form carrier systems or prodrugs through complexation with Phospholipid, greatly enhancing the physical stability, bioavailability of the active ingredients, and their compatibility in aqueous and oily systems. This can effectively improve the in-vivo absorption of active substances and significantly enhance their biological effectiveness.



All products and services can be customized according to customers' needs.

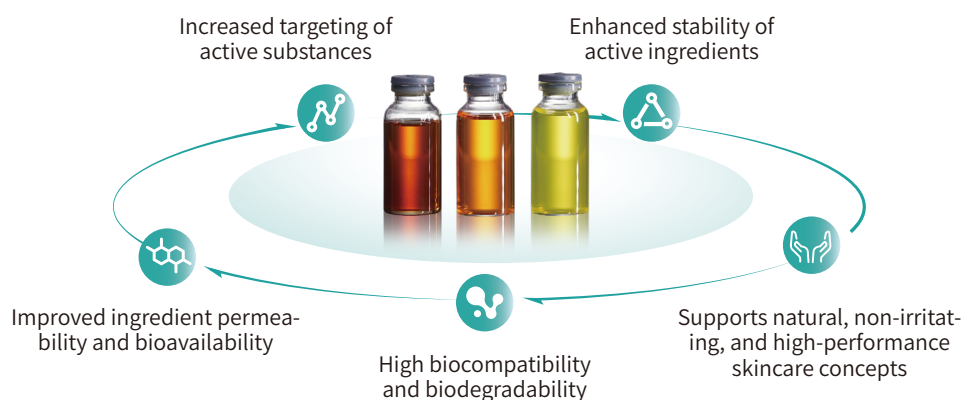
Product Specifications

Name	Appearance	Function	Data (Bioavailability, etc.)
Phospholipid - conjugated Curcumin	Orange - yellow powder	Antioxidant, anti - inflammatory, anti - tumor, etc., improving oral absorption and skin utilization	Particle size D50 $\approx$ 0.5 μ m, re - dissolution $\leq$ 30s, oral bioavailability 7.14%, approximately 6 - fold increase compared to the raw material
Phospholipid - conjugated Berberine	Yellow spherical particles	Regulate glycolipid metabolism, weight loss	Intestinal retention rate up to 90%, relative bioavailability approximately 101%
Phospholipid - conjugated Ginseng Powder	Yellowish - white powder	Anti - fatigue, anti - aging, protect the cardiovascular system	Significantly enhances bioavailability
Phospholipid - conjugated Ginseng Root Extract	Yellowish - white powder	Anti - fatigue, anti - aging, protect the cardiovascular system	
Phospholipid - conjugated Ginseng Stem - Leaf Extract	Yellowish - white powder	Anti - fatigue, anti - aging, protect the cardiovascular system	
Phospholipid - conjugated American Ginseng Powder	Yellowish - white powder	Anti - fatigue, anti - hypoxia, antioxidant, hypoglycemic, regulate immune function	
Phospholipid - conjugated American Ginseng Root Extract	Yellowish - white powder	Anti - fatigue, anti - hypoxia, antioxidant, hypoglycemic, regulate immune function	
Phospholipid - conjugated American Ginseng Stem - Leaf Extract	Yellowish - white powder	Anti - fatigue, anti - hypoxia, antioxidant, hypoglycemic, regulate immune function	
Phospholipid - conjugated Notoginseng Stem - Leaf Extract	Yellowish - white powder	Dilate blood vessels, improve myocardial ischemia, prevent thrombosis	
Phospholipid - conjugated Coenzyme Q10	Orange powder	Anti - aging, antioxidant, improve myocardial function	
Isoquercetin Phospholipid Complex	Yellow powder	Antioxidant, anti - inflammatory, protect the cardiovascular system	



LIPOSOMES

Technical Advantages



Technical Introduction

Liposome and nanocrystal liposome precursor technologies encapsulate active ingredients with a Phospholipid bilayer, enhancing their stability, dispersibility, and system compatibility within formulations.

The liposome structure mimics the skin cell membrane, facilitating the uniform distribution of ingredients in both aqueous and oil-based systems and reducing the damage to active ingredients from the external environment.



All products and services can be customized according to customers' needs.

Product Specifications

Name	Appearance	Function	Data (Bioavailability, etc.)
Salicylic Acid Liposome	Pale yellow liquid	Keratolytic agent, keratoplastic agent	Skin penetration amount can reach $(4327 \pm 134) \mu\text{g}/\text{cm}^2$ within 24 hours
Azelaic Acid Liposome	Pale yellow liquid	Acne treatment, oil control, anti-inflammatory, skin-whitening	Skin penetration amount can reach $(2287 \pm 127) \mu\text{g}/\text{cm}^2$ within 24 hours
Tranexamic Acid Liposome	White or yellowish-white powder	Treatment of melasma, lightening of post-inflammatory hyperpigmentation spots after the subsidence of injury inflammation, hemostasis	
Retinol Liposome	Pale yellow liquid	Anti-aging, antioxidant, keratin metabolism regulation, oil control, and acne prevention	
Astaxanthin Liposome	Orange-red liquid	High - efficiency antioxidant, improves skin damage caused by free radicals, aids in photoprotection	
Vitamin C Nanocrystal Liposome Precursor	White or pale yellow powder	Antioxidant, promotes collagen production	
Glutathione Liposome	White or off-white powder	Repairs skin damage caused by ultraviolet rays	Compared with free glutathione, the transdermal absorption efficiency can be increased by 5 - 10 times (the 24 - hour cumulative penetration amount increases from 5 - 8 $\mu\text{g}/\text{cm}^2$ in the free state to 40 - 80 $\mu\text{g}/\text{cm}^2$ in the liposome state)
α -Ketoglutaric Acid Nanocrystal Liposome Precursor	Milky white liquid	Regulates energy metabolism, antioxidant, anti-aging, promotes tissue repair	Oral utilization rate increases from 15% to over 60%; after continuous administration for 12 weeks, skin elasticity increases by 31%, and telomerase activity increases by 18.7%