

# THE POWER OF X

## Xtreme reliability

For more than 30 years, Xingfa has optimized its vertically integrated operations to successfully develop, produce, and market phosphorus-based fine chemicals to more than 50 countries around the globe. Our team of more than 10,000 employees takes pride in delivering unmatched control of raw materials across food and beverage, agriculture, pharma and nutrition, and industrial markets — from our operations to yours.

## Xceptional quality

Our superior audit results and industry certifications, including ISO9001, ISO14001, ISO18000, ISO22000, NSF International, KOSHER, HALAL, and BRC, confirms Xingfa's compliance to the highest manufacturing standards. We are pleased to accommodate our customers' audit requirements.



## Xcellence in sustainability

Our commitment to sustainable energy not only makes us a green leader for the industry, but also provides cost control for our partners. We own and operate more than 30 hydroelectric stations that generate up to 50% of our annual energy requirements and power our operations. Not only do we offer reliable phosphates supply, but we also deliver peace of mind that our products have been produced ethically and responsibly.

## Xpertise you can count on

Serving a number of major corporations globally, we partner with end users and distributors to deliver an always-reliable, high-quality phosphate supply. Our food grade STPP and SAPP, SHMP, Tech Grade SHPP, DMSO, and Yellow phosphorous ranked first at capacity and sales globally.

## Xplore how we can help you

Talk to a Xingfa team member or visit [xingfausa.com](http://xingfausa.com) to learn more about our high-quality products and services.

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Food & Beverage



more reliable, sustainable,  
high-quality phosphates supply

# RISING TO MEET THE DEMAND FOR PHOSPHATES

As the global population continues to rise, so does the demand for phosphates in food and beverage processing. The global food phosphate market is expected to cross \$2.4 billion by 2024<sup>1</sup>, as forecast by strong growth indicators in dairy, bakery, beverage, and meat processing industries.

In order to meet this rising demand, the food and beverage industry needs a reliable, high-quality, and sustainable supply of phosphates. Xingfa is the global leader in specialty phosphates manufacturing, serving more than 50 countries for over 30 years. By owning and operating phosphate rock mines and derivative manufacturing plants using hydropower stations, we have control over the entire supply chain from rock to ingredient, providing our customers with unmatched reliability, traceability, and sustainability.

<sup>1</sup> Global Market Insights, Inc.

## FOOD AND BEVERAGE MARKETS WE SERVE

We offer specialty ingredients to the food and beverage industry to meet ever-increasing demand. Our diverse portfolio of phosphates and compound food ingredients enables, us to offer innovative solutions for your current and evolving needs.

Products	Meat, Poultry & Seafood	Baking	Dairy	Beverage
Phosphoric Acid Food Grade				X
Monosodium Phosphate (MSP)			X	X
Disodium Phosphate (DSP)			X	X
Trisodium Phosphate (TSP)	X		X	X
Sodium Tripolyphosphate (STPP)	X		X	
Tetrasodium Pyrophosphate (TSPP)	X	X	X	
Sodium Acid Pyrophosphate (SAPP)		X	X	
Trisodium Acid Pyrophosphate (TSAPP)	X		X	
Sodium Hexametaphosphate (SHMP)	X		X	X
Monopotassium Phosphate (MKP)	X		X	X
Dipotassium Phosphate (DKP)			X	X
Tetrapotassium Pyrophosphate (TKPP)	X			
Dicalcium Phosphate (DCPD)		X		
Sodium Trimetaphosphate (STMP)	X		X	
Monoammonium Phosphate (MAP)*		X		
Diammonium Phosphate (DAP)*		X		

\*New product coming soon

### Sodium Tripolyphosphate (STPP)

**Chemical formula:**  $\text{Na}_5\text{P}_3\text{O}_{10}$   
**Molecular weight:** 367.86  
**Standard executed:** GB 25566-2010/FCC  
**Properties:** White powder or granule in appearance. Soluble in water. Available in different types according to request, including bulk density (0.5-0.9g/cm3), solubility (10 gram,20 gram in 100 ml water), quick Dissolve, large granular Etc.  
**Application:** Isolation of multivalent ions and prevention of oxidation and corrosion. Can also be used as a water retention agent, and as a fat and protein emulsifier.  
**Packaging and storage:** 25kg/50lb kraft paper bag, 1000kg jumbo bag. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

### Sodium Acid Pyrophosphate (SAPP)

**Chemical formula:**  $\text{Na}_2\text{H}_2\text{P}_2\text{O}_7$   
**Molecular weight:** 221.94  
**Standard executed:** GB 25567-2010/FCC  
**Properties:** White powder or granular in appearance. Soluble in water.  
**Application:** Used as a leavening agent, reducing zymosis time and can also be used as a water retention agent, and a quality improver for meat and sea food processing.  
**Packaging and storage:** 25kg/50lb kraft paper bag, 1000kg jumbo bag. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

### Tetrasodium Pyrophosphate (TSPP)

**Chemical formula:**  $\text{Na}_4\text{P}_2\text{O}_7$   
**Molecular weight:** 265.90  
**Standard executed:** GB 25557-2010/FCC  
**Properties:** White crystalline or powder in appearance.  
**Application:** Mainly used in meat and seafood processing as a water retention agent, a stabilizer for natural pigments and to prevent fat corruption. It can also be used as a PH modifier, an emulsifier, a quality improver agent in dough and as a nutrient supplement.  
**Packaging and storage:** 25kg/50lb kraft paper bag, 1000kg jumbo bag. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

### Sodium Hexametaphosphate (SHMP)

**Chemical formula:**  $(\text{NaPO}_3)_6$   
**Molecular weight:** 611.82  
**Standard executed:** GB 1890-2005/FCC  
**Properties:** White powder, granular or flake in appearance. Easily soluble in water, but insoluble in organic solvents.  
**Application:** In food industry it can be used as an additive, nourishing agent, quality improver, pH regulator, metalions chelating agent, adhesive and leavening agent.  
**Packaging and storage:** 25kg/50lb kraft paper bag, 1000kg jumbo bag. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

### Trisodium Acid Pyrophosphate (TSAPP)

**Chemical formula:**  $\text{Na}_3\text{HP}_2\text{O}_7 \cdot n\text{H}_2\text{O}$   
**Molecular weight:** 261.95(n=1)  
**Properties:** White powder or granular in appearance. Soluble in water.  
**Application:** Used for moisture regulation and as an emulsion stabilizer. Can also be used as a buffering, chelating, and emulsifying agent.  
**Packaging and storage:** 25kg/50lb kraft paper bag, 1000kg jumbo bags. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

### Monosodium Phosphate (MSP)

**Chemical formula:**  $\text{NaH}_2\text{PO}_4$   
**Molecular weight:** 119.98  
**Standard executed:** GB 25564-2010/FCC  
**Properties:** White powder or granular in appearance. Easily soluble in water, but insoluble in organic solvents.  
**Application:** Used as a buffer, an emulsifier and as a nutritional supplement in foods and beverages.  
**Packaging and storage:** 25kg/50lb kraft paper bags, 1000kg jumbo bag. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.



# COMPOUND WATER HOLDING AGENT FOR MEAT

## Disodium Phosphate (DSP)

**Chemical formula:**  $\text{Na}_2\text{HPO}_4$   
**Molecular weight:** 141.96  
**Standard executed:** GB 25568-2010/FCC  
**Properties:** White powder in appearance. Easy deliquescence. soluble in water, and the water solution is a weak alkaline base, insoluble in alcohol.  
**Application:** Used as a quality improver, an emulsifier, a nutrition enhancer, a fermentation aid and a binder in the food industry.

**Packaging and storage:** 25kg/50lb kraft paper bag, 1000kg jumbo bag. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

## Monopotassium Phosphate (MKP)

**Chemical formula:**  $\text{KH}_2\text{PO}_4$   
**Molecular weight:** 136.09  
**Standard executed:** GB 25560-2010/FCC  
**Properties:** white powder or granular.  
**Application:** Widely used as a bacterial culture agent, a flavoring agent for synthetic sake, as a raw material in potassium metaphosphate production, and as a culture, reinforcing, leavening and fermentation agent in yeast.

**Packaging and storage:** 25kg/50lb kraft paper bags,1000kg jumbo bags. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

## Tetrapotassium Pyrophosphate (TKPP)

**Chemical formula:**  $\text{K}_4\text{P}_2\text{O}_7$   
**Molecular weight:** 330.34  
**Standard executed:** GB/T 25562-2010/FCC  
**Properties:** White powder or granular in appearance. Moisture absorbing, soluble in water but insoluble in ethanol.  
**Application:** Used as an emulsifier, chelating agent and for organizational improvement in detergents, paint ingredients. Can be a dispersant, buffering agent, emulsifier, Etc.  
**Packaging and storage:** In 25kg kraft paper bags, 1000kg jumbo bags. Store in a cool, dry and well-ventilated area.

## Sodium Trimetaphosphate (STMP)

**Chemical formula:**  $(\text{NaPO}_3)_3$   
**Molecular weight:** 305.89  
**Standard executed:** HG/T 4515-2013/FCC  
**Properties:** White powder or granular in appearance. Soluble in water, insoluble in organic solvents.  
**Application:** Used in the food industry as a starch modifier, as a water retention agent in meat processing, as a stabilizer in cheese and dairy products and as a stabilizing agent to protect food from discoloration and the decomposition of vitamin C. Also used as a raw material in vitamin C phosphate.

**Packaging and storage:** 25kg/50lb kraft paper bag, 1000kg jumbo bag. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

## Dipotassium Phosphate (DKP)

**Chemical formula:**  $\text{K}_2\text{HPO}_4$   
**Molecular weight:** 174.18  
**Standard executed:** GB 25561-2010/FCC  
**Properties:** White powder or crystal in appearance.  
**Application:** Used as a buffer, chelating agent, yeast active agent, emulsifying salt and an antioxidant synergist in industry. Also used as stabilizer for coffee mate and soy milk drink, as a nutritional, bacteria blocking agent in fermentation processes.  
**Packaging and storage:** 25kg/50lb kraft paper bag, 1000kg jumbo bag. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

## Dicalcium Phosphate (DCPD)

**Chemical formula:**  $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$   
**Molecular weight:** 172.09  
**Standard executed:** GB 1889-2004/FCC  
**Properties:** White monoclinic crystalline powder in appearance.  
**Application:** Used as a leavening agent, dough conditioner, a nutritional supplement and an emulsion stabilizer in the food industry. Can be used in baked products as a leavening agent, or as a compound bread and fried food improver. Also used in biscuit, milk, cold drink, and ice cream powders as a nutritional supplement or quality improver.  
**Packaging and storage:** 25kg/50lb kraft paper bags, 1000kg jumbo bag. Store in a cool, dry, well-ventilated area away from toxic and hazardous chemicals.

## 1.PROCESSED MEAT PRODUCTS

Xingfa compound for meat adjust PH widely, they are used for enhancing water holding capacity, color protection and taste of various meat products.

### 1.1 Steak

Product	Application	Features	Recommended dosage
XF-S107	Beefsteak, pork chop, meat slices and kebabs	Excellent water holding capacity, high cost performance ratio	1.0%-1.5% (based on meat weight)
XF-M505A	Beefsteak, pork chop	Uniform, stable, fast dissolution	0.3%-0.5% (based on meat weight)
XF-K06		Thickening, improving taste and reducing decoction loss	0.3%-0.6% (based on meat weight)

### 1.2 Poultry

Product	Application	Features	Recommended dosage
XF-S198	Chicken breast row	Low phosphorus, perfect balance between yield and taste	1.2%-1.5% (based on meat weight)
XF-S236	Chicken leg row	Low phosphorus, better elasticity and fiber sensation	0.8%-1.0% (based on meat weight)
XF-M505A	Injection	Uniform, stable, fast dissolution	0.3%-0.5% (based on meat weight)
XF-W601		Non-phosphorus, significantly improving product yield, elasticity and taste	0.5%-1.0% (based on meat weight)

### 1.3 Sausages , Ham and Meatball

Product	Application	Features	Recommended dosage
XF-M501B ( elasticity )	Sausages , Ham and Meatball	High viscosity, quick extraction of salt-soluble protein, improve meat elasticity	0.3%-0.5% ( add as dry powder, based on meat weight)
XF-M301B ( brittleness )		Rapid protein dissolution, make the product crispy and chewy	

# COMPOUND WATER HOLDING AGENT FOR SEAFOOD

# SPECIALTY COMPOUNDS FOR CHEESE, NOODLES,AND LEAVENING AGENTS

## 2.PROCESSED SEAFOOD

We select high quality raw materials and advanced mixing process. We have plenty varieties of products, they have wide range of adjustable PH, can help aquatic products to improve water holding capacity, color protection and taste.

### 2.1 Fish

Product	Application	Features	Recommended dosage
XF-S104	Bssa fillets, Weever fillets and Grass carp fillets.	Excellent flaking performance	Soaking concentration 1%-3%
XF-S158		Improve elasticity and tenderness	
XF-S302		High yield	
XF-M502C	Longsnout catfish fillets、Grass carp fillets and Cod fillets	Improve the taste	
XF-S104		Fast weight gain	
XF-S118	Tilapia mossambica fillets	Low phosphorus and the color is natural	
XF-S108		Non-sodium	
XF-W201		Non-phosphorus	

### 2.2 Shrimp and Shellfish

Product	Application	Features	Recommended dosage
XF-M505B	Shrimp and shellfish	Natural color and crispy taste	Soaking concentration 2%-4%
XF-S506		Excellent water holding capacity	
XF-W301		Non-phosphorus	

### 2.3 Mollusks

Product	Application	Recommended dosage
XF-S101	Acid removal from Peruvian squid	Soaking concentration 2%-4%
XF-S102	Mollusks such as skinned squid	
XF-S106	Mollusks such as squid and octopus with skin	

## 3.IMPROVER FOR BAKING AND FLOUR PRODUCTS

Product	Application	Recommended dosage
XF-N	Flour products	0.2%-0.5% of flour weight
Type A	Baking	0.8%-2% of flour weight

## 4.IMPROVER FOR CHEESE AND DAIRY

Product	Application	Recommended dosage
XF-C302	Cheese	0.3%-0.5% of the final product
XF-M503A	Dairy	

## XPEDITE YOUR R&D WITH CUSTOM COMPOUNDS

In addition to offering specific products for each of these industries, Xingfa can create custom compounds based on your specific needs. Our team of innovative food scientists, fully equipped with state-of-the-art laboratories, is ready to help you solve your most difficult challenges.