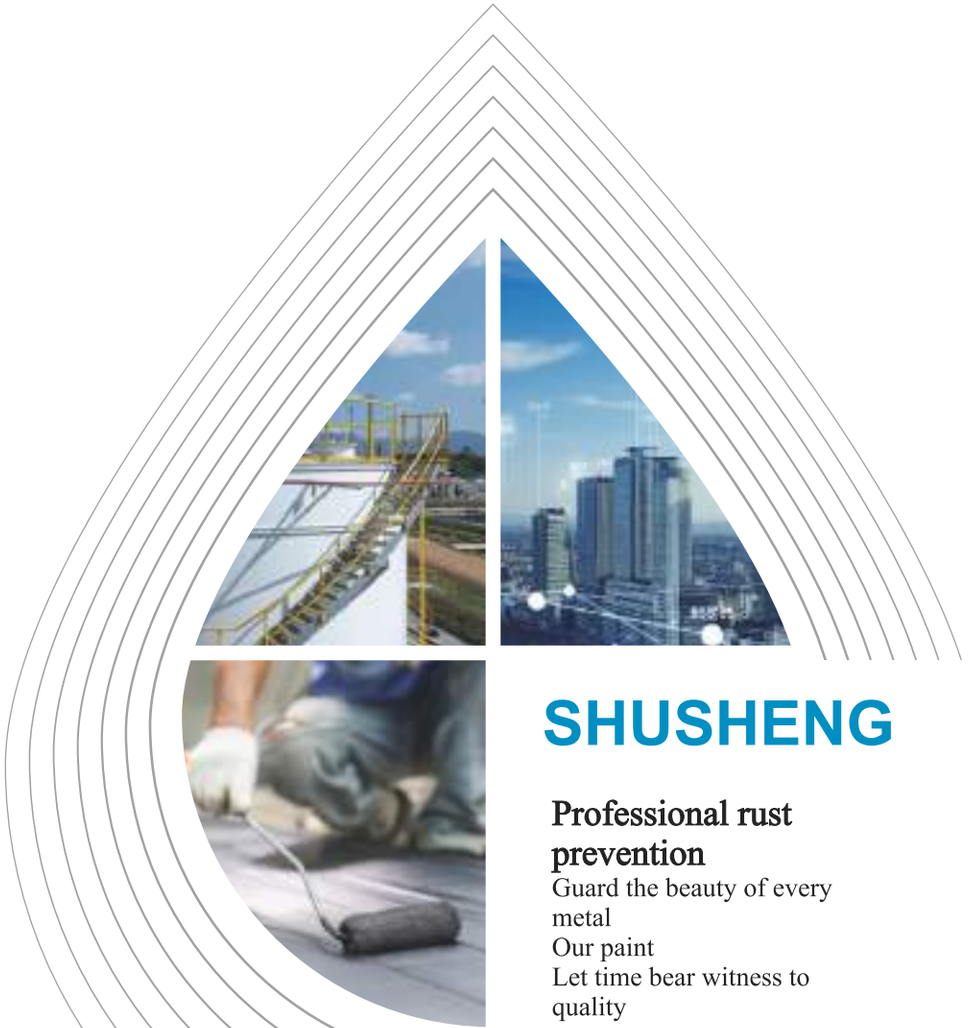
树生
SHUSHENG



SHUSHENG

Professional rust prevention

Guard the beauty of every metal
Our paint
Let time bear witness to quality

杭州凯诺恩新材料有限公司
Hangzhou Kenuoen New Materials Co., Ltd

树生
SHUSHENG

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COMPANY PROFILE

Hangzhou Kenuoen New Materials Co., Ltd

Located in Fangli Village, Wanshi Town, Fuyang District, Hangzhou, formerly known as Hangzhou Fuyang Shu Sheng Factory, Hangzhou Kenuoen New Materials Co., Ltd is a customer-oriented professional engaged in powder blending modification, surface treatment of high-tech environmental protection enterprises, integrating raw material production and processing with new product research and development, which focuses on the field of industrial anti-corrosion coatings, waterborne coatings. The main production of phosphorus iron powder series of anti-rust pigments, AS series of anti-rust pigments, water-based anti-rust pigments, zinc phosphate, zinc phosphomolybdate and zinc strontium phosphate.

Since establishment in 2004, we have been closely focusing on the leading industry of anti-rust pigments, improving production equipment and improving production technology. After years of customers favor and staff unremitting efforts, we have been able to develop rapidly. At present, we employ senior engineers to provide customers with technical advice and perfect pre-sales and after-sales service.

20 Years
Focus on the industry

2004
Since

3000+
Customers

DEVELOPMENT HISTORY

2004 2004 Hangzhou Fuyang Shu Sheng Factory was established and developed East China market

2006 began to form a set of product development, production, sales in one of the high-tech environmental protection enterprises

2008 Developed AS series of anti-rust pigments

2012 Developed water-based anti-rust pigments

2018 Hangzhou Fuyang Shu Sheng Factory changed to Hangzhou Kenuoen New Materials Co., LTD.

2020 Won the Hangzhou "Young Eagle Plan" enterprise

2021 Became a national high-tech enterprise and a technology-oriented small and medium-sized enterprises in Zhejiang Province

2023 Drafting of "Technical Specifications for the preparation of Inorganic substrate phosphate pigments" group standards

2024 After years of development, the company has a sound management system

PRODUCT DESCRIPTION

coating system	PN	Model	Appearance	Oil absorption	Ratio	Performance feature	Recommended dosage %
Oil-based system	Composite iron-titanium powder	B-500	Grey powder	⩽18	3.5-5.0	Color Zinc gray, large specific sag, low oil absorption star, partial or full replacement of zinc powder.	20-40
	Ultrafine metallurgical powder	B-503	Grayish black powder.	⩽12	4.0-5.0	Low oil absorption, specific gravity, can replace part of the zinc powder.	15-35
	Ferrophosphorus	L-800	Grayish black powder.	⩽11	5.0-6.0	The specific is large, the oil absorption is low, and it has the advantages of good anti-corrosion and wear resistance.	
	Nano scale scale anticorrosive pigment	L-808	Black powder	30-45	1.6-2.3	Sheet structure, excellent corrosion resistance, good salt spray resistance, and has the characteristics of temperature resistance, weather resistance, good chemical stability, strong conductivity and so on.	3-8
	Anti-rust powder	AS-400	Light white powder.	15-25	2.5-3.0	Low oil absorption, can effectively improve the volume solid content, good anti-rust performance.	20-40
	Antirust pigment	AS-406	Beige white powder.	20-30	2.0-3.0	High phosphorus content, low oil absorption, cost-effective.	5-20
	Zinc phosphate(standard)	AS-408-1	White powder	20-35	2.0-3.0	Easy to disperse, cost-effective, excellent anti-corrosion performance.	5-12
	Zinc phosphate(high purity)	AS-408-2	White powder	20-35	2.0-3.0	Easy to disperse, acid, alkali, water resistance, excellent corrosion resistance.	50-12
	Aluminum tripolyphosphate	AS-601	White powder	25-35	2.0-3.0	Excellent performance, salt spray performance improved significantly, cost-effective.	5-12
	Modified aluminum tripoly phosphate	AS-602	White powder.	25-35	2.0-3.0	It is a modified composite product with outstanding cost performance and good anti-rust performance.	5-12
Water based system	Water-based composite iron-titanium powder	B-500S	Grey powder	15-25	3.0-4.5	High fineness, can be directly dispersed at high speed, specific gravity quotient, low oil absorption, partial or full replacement of zinc powder, color zinc gray.	20-40
	Zinc strontium phosphate	AS-901	Light yellow powder.	25-40	2.2-3.2	Instead of saw yellow, the heavy metal contant meets the GB30981 standard.	0.5-2.5
Filling system	Zinc phosphomolybdate	AS-906	White powder	25-40	2.2-3.2	Water and oil are universal, and the salt spray performance is obviously improved.	3-8
	Barium sulfate	D-600	Light white powder.	10-15	3.5-4.5	Low oil absorption, high specific gravity, good dispersion, cost-effective.	15-35
	Feldspar powder	D-801	White powder	18-22	2.1-2.6	Acid and alkali resistance,enhance the hardness of the paint film, significantly improve wear resistance,scratch resistance, low specific gravity, improve the volume of the paint solid content.	30-40
	Microsilica	D-501	White powder	22-30	2.1-2.5	Acid and alkali resistance, high hardness, high whiteness, low specific gravity.	15-30

Composite inron-titanium powder B-500

Product composition

This product is a composite powder obtained by modifying a certain amount of composite ultra-fine powder, which is based on the surface treated composite oxide and metal salt as the carrier.

Product uses

This product can completely replace cloud iron, zinc oxide, zinc phosphate and other anti-rust pigments. It can also be used with the above pigments. Also can be partially substituted for zinc powder in zinc-rich primers..

Rust prevention mechanism

Through the surface treatment of powder particles, the binding force of pigment and base material is enhanced, and the small size effect and surface effect caused by the introduction of composite ultrafine powder are improved to improve the density of the paint film, and effectively block the erosion of water molecules and oxygen on the steel surface. At the same time, the composite phosphate of the product can generate a passivation film on the surface of the steel, which is firmly attached to the surface of the steel, thus protecting the steel member.

Product features

High-performance

The paint making process is very easy to disperse, the anti-rust paint or primer made has goo d stability, is not easy to layer, and the anti-rust ability is better than other phosphate anti-rust pigments, and the cost performance is high.

Widely applicable

Suitable for all types of solvent-based and water-base dbase materials to make anti-rust paint and primer.

Easy to use

The anti-rust paint made of this product is easy to use, and can be sprayed or brushed.

Avirulent receptacle

This product is non-toxic, harmless and non-combusti ble.

Technical indicators

Item	B-500	Ultrafine metallurgical powder B-503	Detection mode
Exterior	Grey powder	Gray-black powder	Visual inspection
Sieve residue (500 mesh) %	< 1.0	(500 mesh) Spoon 0	GB/T5211.18-2015
Density g/cm3	3.5-5.0	4.0-5.0	GB/T1713-2008
Oil absorption %	≤18	≤12	GB/T5211.15-2014
Water-soluble subatance%	≤0.5	≤0.5	GB/T5211.2-2003
Moisture (105℃) %	≤1.0	≤1.0	GB/T5211.3-2020
PH value of water suspension	6.0-9.0	6.0-9.0	GB/T5211.6-2020

Usage	Recommended dosage	Package	Storage
According to the conventional anti-rust coating production process can be produced	Recommended dosage 20%-40%	Double plastic bag packing 25KG/ bag	Keep ventilated and dry Stored for one year without deterioration

Ferrophosphorus L-800

Product features

A large number of experiments show that

It can partially replace zinc powder with rising price; Good conductivity is very important for cathodic protection of zinc-rich primer; Maintain the long-term stable conductive path of the coating, increase the utilization rate of zinc powder, improve and improve the salt spray resistance of zinc-rich primer, and significantly improve the film properties and welding characteristics of zinc-rich primer.

High-temperature resistance

It has good high temperature resistance, and the paint made of it can withstand 500-1500 degrees high temperature.

Stable property

Iron in phosphorus-iron powder is the highest oxidation state, showing chemical inertia and stability.Environmental protection

Non-toxic, odorless and odorless; Reduce zinc fog generated by welding and cutting of zinc-rich primer and improve working environment.

Product composition

The ferrophosphorus powder is made of super refined ferrophosphorus and processed by special equipment. It can be used to produce zinc-rich primer, other workshop primers or duty paint. It is an ideal product for reducing the cost of heavy-duty anticorrosive coatings, and is widely used in containers, ships, high-temperature resistant coatings, conductive coatings for steel structures and heavy-duty anticorrosive zinc-rich coating systems.

Product uses

The protection of phosphor-iron powder to metal substrate mainly consists of three aspects: physical shielding, chemical corrosion inhibition and electrochemical cathodic protection, which work together to achieve its excellent performance. Sex, play a role in blocking corrosive medium and further shielding;

1. [Shusheng Brand] Phosphor-iron powder fills the paint film structure with its fine particles, cuts off the pores in the coating and improves the density of the paint film.
2. The phosphorus iron powder undergoes passivation and phosphating reactions with the metal surface, so that the metal surface partially or completely avoids the possibility of becoming an anode, and there are many micropores on the particles, which is more convenient for the adhesion of paint films;
3. The excellent electrical conductivity of phosphorus-iron powder, the conductive protective layer formed on the steel surface, so that the substrate is protected by the cathode. At the same time, the corrosion product of phosphorus-iron powder is a stable and insoluble high-valent iron complex, which gathers in the coating and enhances the shielding effect.

Technical indicators

Item	L-800	Test method
Exterior	Grey black powder	Visual estimate
P_2O_5/%	≥20.0	GB/T23843-2009
Fe_2Q_5/%	≥55.0	GB/T1863-2008
Sieve residue (800 mesh) /%	≤1.0	GB/T5211.18-2015
Density /g/cm^3	5.0-6.0	GB/T1713-2008
Oil absorption/%	≤11	GB/T5211.15-2014
Water-soluble subatance%	≤0.5	GB/T5211.2-2003
Moisture (105^{0}C) %	≤1.0	GB/T5211.3-2020
PH value of water suspension	6.0-9.0	GB/T5211.6-2020

Recommended dosage	Package	Store
Recommended dosage 15%-35%	Packed in double plastic bags, 25KG/ bag.	Keep ventilated and dry. Store for one year without deterioration.

Nano-scale anticorrosive pigment L-808

Product features

1. High temperature resistance melting point of 3850+/-50℃, used for high temperature anticorrosive coatings.

2. Belongs to metal materials, electrical and thermal conductivity exceeds metal materials, and are the first choice for antistatic coatings.

3. It is scaly, and the larger the scales, the better the lubrication performance. It is used as a mechanical lubricant.

4. Chemical stability can resist acid and alkali corrosion at room temperature, used in heavy-duty anticorrosive coatings series.

Product composition

Gray-black greasy opaque powder with metallic luster, the main component is carbon. Scaly layered structure, with good high temperature resistance, electrical conductivity, thermal conductivity, lubrication, plasticity and acid and alkali resistance. Chemically inavtive corrosion resistance.Used as pigment in antirust and anticorrosive paint, high temperature paint and other coatings.

Product uses

It is widely used in industrial coatings. Many coatings can change their properties and make their anticorrosion performance more excellent because of adding nano-scale anticorrosive pigments.

1. Used as anti-corrosion materials.
   As an anticorrosive material, it has good corrosion resistance with antirust primer made of antirust pigments, fillers and oils.
2. Used as a conductive coating.
   Can be directly used as a conductive filler for conductive coatings, and the coatings have anti-corrosive medium penetration. The characteristics of long-term electrostatic conduction enhance the anticorrosion function of cathode, which is used to conduct electrostatic coating on the inner wall of crude oil storage tank.

Technical indicators

Item	L-808	Test method
Exterior	Black powder	Visual estimate
Sieve residue (800 mesh) /%	≤1.0	GB/T5211.18-2015
Density /g/cm³	1.6-2.3	GB/T1713-2008
Oil absorption/%	30-45	GB/T5211.15-2014
Water-soluble subatance%	1.0	GB/T5211.2-2003
Moisture(105°C)%	1.0	GB/T5211.3-2020
PH value of water suspension	6.0-9.0	GB/T5211.6-2020

Recommended dosage	Package	Store
Recommended dosage 3%-8%	Packed in double plastic bags, 10KG/ bag.	Keep ventilated and dry. Store for one year without deterioration.

Anti-rust powder AS-400

Product features

High-performance
This product has outstanding dispersibility, stability and rust resistance, and obvious cost performance, which can greatly reduce the production cost of rust-proof paint.

Wide application
Because it is a pale white powder, it can be used to make antirust primer with any hue as required.

Nonhazardous

This product contains no heavy metals, is a completely environment-friendly and non-toxic new product, and is easy to use, and can be sprayed or brushed. It is an ideal antirust product.

Product composition

This product is made of surface-treated composite oxides and metal salts, and a certain amount of composite ultrafine powder is introduced.

Rust prevention mechanism

Through the surface treatment of powder particles, the binding force between pigment and organic binder is enhanced, and the small size effect and surface effect caused by the introduction of composite ultra-fine powder improve the compactness of paint film, greatly reduce the permeability, and effectively prevent the corrosion of steel by water molecules, oxygen and other gases.

Technical indicators

Item	AS-400	Test method
Exterior	Light white powder	Visual estimate
Sieve residue (500 mesh)/%	⩽1. 0	GB/T5211. 18-2015
Density /g/cm^3	2. 5-3. 0	GB/T1713-2008
Oil absorption/%	15-25	GB/T5211. 15-2014
Water-soluble subatance%	⩽1. 0	GB/T5211. 2-2003
Moisture(105^{0}C)%	⩽1. 0	GB/T5211. 3-2020
PH value of water suspension	6.0-9.0	GB/T5211. 6-2020

Usage	Recommended dosage	Package	Store
It can be produced according to the conventional antirust coating production process.	Recommended dosage 3%-8%	Packed in double plastic bags, 25KG/ bag.	Keep ventilated and dry. Store for one year without deterioration.

Antirust pigment AS-406

Product features

High-performance

The paint preparation process is very easy to disperse, and the prepared antirust paint or primer has good stability, difficult delamination, excellent antirust performance and high cost performance.

Wide application

Because it is off-white powder, it can be used to make antirust primer with any hue as required. The cost performance ratio is obvious, and the production cost of antirust paint can be greatly reduced.

AS-406

The antirust pigment contains no heavy metals, is a completely environment-friendly and non-toxic product, and is convenient to use, and can be sprayed or brushed.

Product composition

This product is made of surface-treated phosphate as carrier and a certain amount of composite ultra-fine powder.

Scope of application

Suitable for making non-toxic antirust paint,primer and rustproof paint with primer and topcoat combined.This product can replance convertional antirust pigments such as red lead, zinc phosphate and aluminum tripolyphosphate, and can also be used with the above pigments.

Rust prevention mechanism

The antirust mechanism of this series of powders is a dual antirust mechanism of physical antirust and chemical antirust. Chemical rust prevention is to isolate the corrosion of steel by water, oxygen and chlorine by generating insoluble solid iron phosphate complex salt between phosphate radical in anhydrous polyphosphate and iron atom on the surface of steel. The adhesion of the pigment on the steel surface is greatly enhanced, so that it has excellent antirust ability.

Technical indicators

Item	AS-406	Test method
Exterior	Off-white powder	Visual estimate
Sieve residue (500 mesh)/%	≤1. 0	GB/T5211. 18-2015
Density /g/cm^3	2. 0-3. 0	GB/T1713-2008
Oil absorption/%	20-30	GB/T5211. 15-2014
Water-soluble subatance%	≤2. 0	GB/T5211. 2-2003
Moisture(105^{0}C)%	≤2. 0	GB/T5211. 3-2020
PH value of water suspension	6.0-9.0	GB/T5211. 6-2020

Usage	Recommended dosage	Package	Store
It can be produced according to the conventional antirust coating production process.	Recommended dosage 5%-20%	Packed in double plastic bags, 25KG/ bag.	Keep ventilated and dry. Store for one year without deterioration.

Zinc phosphate AS-408

Product uses

Widely used in all kinds of primers and rustproof paint with primer and topcoat combied can be used with all kinds of pigments and fillers, and can also be used with all kinds of antirust pigments to prepare all kinds of high-performance anti-corrosion coatings. Suitable for all kinds of solvent-based coatings and waster-soluble resin coatings such as high adaptablility water-borne epoxy ester dip coating;It can also be applied to thick paste coating,powder coating, organic titanium anticorrosive coating, rusty coating and asphalt paint, zinc-rich primer, fire retardant coating, heat resistant coatings and so on.

Rust prevention mechanism

This product can be used as an antirust pigment and added to antirust coatings to form chelates with various metal ions , forming an excellent passivation film on the surface of the coated object, which can effectively improve the adhesion of the coating film, salt spray resistance, corrosion resistance and foaming resistance. Its antirust performance is better than that of red lead, zinc chrome yellow, zinc phosphate and other antirust pigments, and it has the effects of isolation, rust prevention, passivation and corrosion prevention after painting.

Product features

Nonhazardous

This product is non-toxic and contains no harmful metals such as lead and chromium, and can effectively replace traditional harmful pigments such as red lead and zinc chrome yellow.

Wide applicability

The paint generated by this product can be used not only for steel, but also for rust prevention and corrosion protection of light metal materials such as zinc and aluminum.

High cost performance

This product obviously improves the performance, weather resistance, moisture resistance, sun resistance, dirt resistance, acid and alkali resistance of paints and coatings , and is the most ideal green environmental protection product.

Technical indicators

Item	Normalized form	High purity type	Test method
Type	AS-408-1	AS-408-2	/
Exterior	White powder	White powder	Visual estimate
Zinc contert %	30.0-40.0	45.0-50.0	HG/T4824-2015
Sieve residue /%	(500 mesh) ≤1. 0	(800 mesh) ≤1. 0	GB/T5211. 18-2015
Density /g/cm^3	2.0-3.0	2.0-3.0	GB/T1713-2008
Oil absorption/%	20-35	20-35	GB/T5211. 15-2014
Water-soluble subatance%	≤1. 0	≤1. 0	GB/T5211. 2-2003
Moisture(105^{0}C)%	≤1. 0	≤1. 0	GB/T5211. 3-2020
PH value of water suspension	6.0-9.0	6.0-9.0	GB/T5211. 6-2020

Recommended dosage	Package	Store
Recommended dosage 3%-8%	Packed in double plastic bags, 25KG/ bag.	Keep ventilated and dry. Store for one year without deterioration.

Aluminum tripolyphosphate AS-601

Product features

Environmental protection, non-toxicity, no heavy metal, non-flammability, easy dispersion and no thickening of the prepared water-based paint, and the salt water resistance of the paint film ranks among the best in similar products, and the finished product is stable in storage.

Physical rust prevention

Ultrafine flake powder can form a good physical shielding effect.

Chemical rust prevention

The modified phosphate is chemically complexed with the surface of the coated object to form an insoluble passivation film, which inhibits the corrosion of metal substrates such as steel by the environment.

Product composition

Modified phosphate and ultrafine flake powder.

Product uses

This product has a wide range of applicability, can replace phosphate antirust pigments such as water-based zinc phosphate, and is widely used in water-based steel structures, water-based ordinary industrial parts and other fields.

Technical indicators

Item	Aluminum tripolyphosphate	High purity typeModified aluminum tripolyphosphate	Test method
Type	AS-601	AS-602	/
Whiteness	90.0-95.0	85.0-90.0	/
P_2O_5 %	60.0-70.0	30.0-40.0	/
Al_2O_3 %	20.0-30.0	10.0-20.0	/
Sieve residue /%	(800 mesh) ≤1. 0	(500 mesh) ≤1. 0	GB/T5211. 18-2015
Density /g/cm^3	2.0-3.0	2.0-3.0	GB/T1713-2008
Oil absorption/%	20-35	20-35	GB/T5211. 15-2014
Water-soluble subatance%	≤2. 0	≤2. 0	GB/T5211. 2-2003
Moisture(105^{0}C)%	≤1. 5	≤1. 5	GB/T5211. 3-2020
PH value of water suspension	6.0-9.0	6.0-9.0	GB/T5211. 6-2020

Usage	Recommended dosage	Package	Store
It can be produced according to the conventional antirust coating production process.	Recommended dosage 5%-12%	Packed in double plastic bags, 25KG/ bag.	Keep ventilated and dry. Store for one year without deterioration.

Zinc strontium phosphate AS-901

Product features

1. The dosage is small, and the corrosion resistance is excellent. The recommended dosage is 0.5%-2.5%.
2. Good environmental protection, which can be restricted by GB30981-2020 heavy metal harmful substances.
3. Good storage stability in aqueous system.

Physical rust prevention

This product can form a good conductive path in the paint film and improve the cathodic protection efficiency.

Chemical rust prevention

The modified strontium phosphate chemically complexed with the surface of the coated object to form an insoluble passivation film, which inhibited the environmental corrosion of metal substrates such as steel.

Product composition

Ultrafine powder with modified strontium salt and phosphate as the main body.

Product uses

This product has a wide range of applicability, and its performance exceeds that of traditional antirust pigments such as zinc molybdate, aluminum tripolyphosphate and zinc phosphate. It can effectively replace strontium chrome yellow and is widely used in electromechanical, steel structure, ships, ordinary industrial parts and other fields.

Application recommendation

This product is suitable for waterborne two-component epoxy, waterborne acrylic acid, waterborne alkyd and waterborne epoxy ester coatings. It is the most suitable antirust pigment for water-based steel structure coatings, maintenance primers, shop primers and anti-corrosion primers, and it is also one of the excellent rusty passivation pigments in water-based bottom-integrated system. Solve the problems of rust resistance, salt spray resistance and environmental protection of water-based steel structures, and can be made into light-colored series such as light blue and light gray;

Solvent-based coating system

The products are also suitable for application scenarios of solvent-based anticorrosive coatings.

Technical indicators

Item	AS-901	Test method
Exterior	Pale yellow powder	Visual estimate
Sieve residue (500 mesh) /%	≤0. 5	GB/T5211. 18-2015
Density /g/cm^3	2. 2-3. 2	GB/T1713-2008
Oil absorption/%	25-40	GB/T5211. 15-2014
Water-soluble subatance%	≤2. 0	GB/T5211. 2-2003
Moisture(105^{0}C)%	≤1. 0	GB/T5211. 3-2020
PH value of water suspension	6.0-9.0	GB/T5211. 6-2020

Usage	Recommended dosage	Package	Store
It can be produced according to the conventional antirust coating production process.	Recommended dosage 0.5%-2.5%	Packed in double plastic bags, 25KG/ bag.	Keep ventilated and dry. Store for one year without deterioration.

Zinc phosphomolybdate AS-906

Product composition

Ultrafine flake powder with modified molybdate and phosphate as the main body.

Product uses

This product has a wide range of applicability, and its performance exceeds that of traditional antirust pigments such as zinc molybdate, aluminum tripolyphosphate and zinc phosphate, and is widely used in electromechanical, steel structure, ships, ordinary industrial parts and other fields.

Product features

Environmental protection, non-toxic, non-heavy metal, non-combustible, the salt water and salt fog resistance of the paint film is among the best in similar products, and the finished product is stable in storage.

Physical rust prevention

This product can form a good conductive path in the paint film and improve the cathodic protection efficiency.

Chemical rust prevention

The modified molybdate and phosphate chemically complex with the surface of the coated object to form an insoluble passivation film, which inhibits the environmental corrosion of metal substrates such as steel.

Technical indicators

Item	AS-906	Test method
Exterior	Pale yellow powder	Visual estimate
P_2O_5%	≥35. 0	/
Al_2O_3%	≥5. 0	/
MoO_3%	0.5-1.0	/
ZnO%	≥50. 0	/
Sieve residue (800 mesh) /%	≤0. 5	GB/T5211. 18-2015
Density /g/cm^3	2. 2-3. 2	GB/T1713-2008
Oil absorption/%	25-40	GB/T5211. 15-2014
Water-soluble subatance%	≤2. 0	GB/T5211. 2-2003
Moisture(105^{0}C)%	≤0. 8	GB/T5211. 3-2020
PH value of water suspension	6.0-9.0	GB/T5211. 6-2020

Usage	Recommended dosage	Package	Store
It can be produced according to the conventional antirust coating production process.	Recommended dosage 3%-8%	Packed in double plastic bags, 25 KG/ bag.	Keep ventilated and dry. Store for one year without deterioration.