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水性铝银浆产品分册

WATERBORNE ALUMINIUM PIGMENT

如需了解产品详情请拨打  
☎ 400 999 2508

 **Sunrise** 旭阳<sup>®</sup>  
aluminium pigments

# PRESENTATION

## 水性铝银浆介绍



水性铝颜料又称水性铝银浆，是随着水性涂料的开发而发展起来的。由于金属铝是活泼的两性金属元素，易与水、酸、碱发生反应。因此，应用于水性树脂体系时，必须要经过特殊的表面处理。目前，市场上水性铝银浆制备方法约分为四类：一、添加阻蚀剂法；二、铬酸、磷酸等及其盐类钝化法；三、无机二氧化硅包覆法；四、无机有机双层包覆或杂化包覆法。不同的包覆方法有着各自的优缺点，在市场上都有着一席之地。随着社会的进步，对环保、性能等要求的提高，后两种方法包覆的铝银浆在市场上占有一定优势。

Waterborne aluminium pigment, also known as waterborne aluminium paste, developed with the growth of Water-based coatings. As the metal aluminum is amphoteric active metal elements, which is easy to react with water, acid and alkali, it should take special surface treatment when add in aqueous resin system. Currently in the market, the way of making aqueous aluminium paste can be divided into 4 methods: 1. Add corrosion inhibitor; 2. Chromic acid or chromate passivation; 3. Silica coating method; 4. Inorganic and organic double-coated or interpenetrating networks method (IPN). Different methods have different advantages and disadvantages separately and they all occupy a certain space in the market. Along with the progress of society and the requirements for environmental protection and characteristics of product, the last two methods take great advantage in the market.

# WATERBORNE ALUMINIUM PASTE

## 旭阳水性铝颜料

### WA系列亲水型铝银浆

#### WA series hydrophilic aluminium pigment

- ① 该系列铝颜料为表面经过特殊钝化处理，它能够和水性树脂体系具有良好的相容性，同时具有优异的金属效果。
- ② 该系列铝银浆正常情况下保质期为3个月，配成水漆后请尽快使用完，不建议存储。
- ③ 适用指向性较强

- ① This series aluminium pigment was treated by special passivation on the surface. It has good compatibility with waterborne resin system and excellent metal effect.
- ② The shelf life of this series aluminium pigment is 3 months, please use it as soon as possible after making the paint. We do not recommend stocking the paint.
- ③ Having specific application in different fields.

型号 Grade	固体含量 Non-Volatile Content % (±2)	表面处理 Surface treatment	中位径 D50- Value (µm)	溶剂 Solvent	筛余物 Sieve Residue	包装 Package (kg)
WA8005	62	磷酸酯 Phosphorate	5	BG/IPA	0.1 (325Mesh)	25
WA8009	62	磷酸酯 Phosphorate	9	BG/IPA	0.2 (325Mesh)	25
WA701	62	磷酸酯 Phosphorate	10	BG/IPA	0.2 (325Mesh)	25
WA702	62	磷酸酯 Phosphorate	12	BG/IPA	0.2 (325Mesh)	25
WA8015	62	磷酸酯 Phosphorate	15	BG/IPA	0.3 (325Mesh)	25
WA8321	65	磷酸酯 Phosphorate	21	BG/IPA	0.3 (325Mesh)	25
WA8224	65	磷酸酯 Phosphorate	24	BG/IPA	0.3 (200Mesh)	25
WA8238	65	磷酸酯 Phosphorate	38	BG/IPA	0.5 (200Mesh)	25
WA8255	68	磷酸酯 Phosphorate	55	BG/IPA	0.5 (200Mesh)	25
WA8270	68	磷酸酯 Phosphorate	70	BG/IPA	0.5 (200Mesh)	25

### WH系列水性铝颜料

#### WH series waterborne aluminium pigment

- ① 该系列铝颜料为表面经过二氧化硅和高分子材料双层包覆处理的水性铝颜料,包膜厚度均匀、密实,不影响铝片的金属光泽,在长时间的储存过程中,水或酸、碱性物质不易渗透包覆层,不产生“涨听”现象,分散性、白亮度好。
- ② 广泛应用于水性烤漆、水性塑胶漆、水性油墨、水性建筑涂料等。
- ① Of this series, aluminium flake are double coated with SiO2 and high polymer material. The coating thickness is uniform and dense, which will not affect the metallic luster of aluminium flake. During its long-term storage, water, acid or alkali material is hard to permeate the coating layer, so the product has great dispersity, whiteness and brightness, having no tendency to react chemically or produce gas.
- ② Widely used in waterborne baking varnish, waterborne plastic coatings, waterborne printing inks, waterborne construction coatings, etc.

型号 Grade	固体含量 Non-Volatile Content % (±2)	表面处理 Surface treatment	中位径 D50- Value (µm)	溶剂 Solvent	筛余物 Sieve Residue	包装 Package (kg)
WH8005	60	SiO2/高分子材料	5	IPA	0.1 (325Mesh)	15
WH701	60	SiO2/高分子材料	10	IPA	0.2 (325Mesh)	15
WH8009	60	SiO2/高分子材料	9	IPA	0.2 (325Mesh)	15
WH702	60	SiO2/高分子材料	12	IPA	0.2 (325Mesh)	15
WH8015	60	SiO2/高分子材料	15	IPA	0.3 (325Mesh)	15
WH8221	65	SiO2/高分子材料	21	IPA	0.3 (325Mesh)	15
WH8224	65	SiO2/高分子材料	24	IPA	0.3 (200Mesh)	15
WH8238	65	SiO2/高分子材料	38	IPA	0.5 (200Mesh)	15
WH8255	68	SiO2/高分子材料	55	IPA	0.5 (200Mesh)	15
WH8270	68	SiO2/高分子材料	70	IPA	0.5 (200Mesh)	15

### WL系列水性铝颜料

#### WL series waterborne aluminium pigment

- ① 系列铝颜料为表面经过二氧化硅特殊工艺处理的水性铝颜料,包膜厚度均匀、密实,不影响铝片的金属光泽,在长时间的储存过程中,水或碱性物质不易渗透包覆层,不产生“涨听”现象,耐高温、耐黄变性好。
- ② 广泛应用于水性烤漆、水性塑胶漆、水性油墨、水性建筑涂料等。
- ① This series aluminium pigments are coated with SiO2 by special surface treatment, and has uniform thickness and close-grained capability. During its long-term storage, water or alkali material is hard to permeate the coat so the product has great heat-resistant and yellowing-resistant.
- ② having no tendency to react chemically or produce gas. Widely used in waterborne baking varnish, waterborne plastic coatings, waterborne printing inks, waterborne construction coatings, etc.

型号 Grade	固体含量 Non-Volatile Content % (±2)	表面处理 Surface treatment	中位径 D50- Value (µm)	溶剂 Solvent	筛余物 Sieve Residue	包装 Package (kg)
WL8005	60	SiO2	5	IPA	0.1 (325Mesh)	15
WL701	60	SiO2	10	IPA	0.2 (325Mesh)	15
WL8009	60	SiO2	9	IPA	0.2 (325Mesh)	15
WL702	60	SiO2	12	IPA	0.2 (325Mesh)	15
WL8015	60	SiO2	15	IPA	0.3 (325Mesh)	15
WL8221	65	SiO2	21	IPA	0.3 (325Mesh)	15
WL8224	65	SiO2	24	IPA	0.3 (200Mesh)	15
WL8238	65	SiO2	38	IPA	0.5 (200Mesh)	15
WL8255	68	SiO2	55	IPA	0.5 (200Mesh)	15
WL8270	68	SiO2	70	IPA	0.5 (200Mesh)	15

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|--|---|
| <p><b>备注</b></p> <ul style="list-style-type: none"> <li>① IPA:异丙醇</li> <li>BG:乙二醇单丁醚</li> <li>② 更多型号可按需生产</li> </ul> | <p><b>COMMENTS</b></p> <ul style="list-style-type: none"> <li>Isopropyl Alcohol</li> <li>2-Butoxyethanol</li> <li>More grades can be customized as customers' requirements</li> </ul> |
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# APPLICATION GUIDE

## 应用须知

### ① 存储稳定性检测 (建议在使用铝银浆之前做该项检测)

1份铝银浆 + 9份水性基料 (PH=5-9) 制备成漆200g, 存于密闭容器内40°C存储30天或50°C存储7天, 存储后观察整体性能变化,以及放气量不超过10ml

#### 2.建议铝银浆添加方法

第一步: 建议以1:1.5或1:2的比例把铝浆预先分散在助溶剂(醚、醇或去离子水中的一种或几种)中, 在预分散时添加湿润分散剂效果更佳;

第二步: 将水性树脂和其它助剂按照配方的比例加入分散缸, 搅拌均匀;

第三步: 在搅拌状态下将铝浆分散液加入到分散好的水性树脂体系中, 低速搅拌(建议桨叶式分散, 转速控制在300-500rpm)均匀, 确保其完全分散, 使颜料尽量得到更为理想的效果。

### ② 水性铝银浆存储须知:

WA系列铝银浆未开封时储存期为3个月, 开封后易与空气接触, 防止品质下降, 请尽快使用完, 制漆后建议存储不超过15天;

WH/WL系列铝银浆未开封时储存期为12个月, 如超过保质期建议使用前做小试, 制漆后建议存储不超过3个月

### ③ 存储条件: 请避免光线直射, 温度不超过25°C, 湿度不超过60, 取料后及时封口。

### ④ 申明: 以上检测方法和存储期限为我司根据市场客户反馈以及内部实验得到的参考数据, 仅供客户参考。由于体系、配方、使用环境等不同, 广大客户在使用前需认真检测, 防止带来不必要的经济损失。

### ① Storage stability detection (it is recommended to do this test before using aluminum silver paste)

1. Make 200g paint with 20g Aluminium Paste and 180g water-based binders (PH=5-9).

2. Then store the paint in a sealed container @40 °C for 30days,or @50 °C for 7 days.

3. Observe if there's any change of the performance, and the amount of gassing should be less than 10ml.

#### Suggestions for adding aluminium silver paste:

1. The first step: We recommend to pre disperse aluminium paste and cosolvents (ether, alcohol or deionized water) in the proportion of 1:1.5 or 1:2, and adding wetting dispersant which will have better effect in the pre dispersion process;

2. The second step: Put the water resin and other additives into the dispersed cylinder and stirring evenly in accordance with the proportion of the formula;

3. The third step: In the state of stirring, add the aluminum paste dispersing liquid into the waterborne resin, stirring at low-speed (recommended paddle dispersed, the speed should be controlled in the 300-500rpm) to ensure the uniform, fully dispersed, the pigment will achieved more satisfactory results.

### ② Instructions for storage of waterborne aluminum silver paste:

The unopened WA series aluminum paste can be stored for 3 months. After opening, it's easily to contact with air. To prevent the decline in quality, please use it up as soon as possible, after 15 days when the paint is made;

The unopened WH/WL series aluminum paste can be stored for 12 months. If the expiration date is exceeded, please make the trial before using it. Recommend storage period is not more than 3 months after the paint is made;

### ③ Storage conditions: please avoid direct light, the temperature should be no higher than 25 degrees, the humidity is no more than 60, timely sealing after picking

### ④ Statement: the above detection methods and storage period were obtained according to the customer's feedback and internal experiments, it's for customer reference only. Due to the use of system, formula, and environment, the customer needs to be carefully tested before use, to prevent unnecessary economic losses.

# APPLICATIONS GUIDE OF WATERBORNE ALUMINIUM PIGMENT PASTE

## 水性铝银浆行业应用指南

产品类型 Products	行业 Applications	塑胶漆 Plastic Paint	金属漆 Metal Paint	建筑漆 Construction Paint	木漆 Wooden Paint	玻璃漆 Glass Paint	印刷行业 Printings 凹印、胶印 Gravure, offset screen	丝印 Screen printing
	008	■	■	■	■	■	★	■
	8005	★	■	■	■	▲	★	■
	8008A	★	★	■	▲	■	■	■
WH	8214	★	★	★	■	▲	■	▲
WL	8230	■	★	■	★	■	■	★
	8255	■	■	★	★	■	■	★
	408	■	▲	■	■	■	■	■
	702	■	▲	★	▲	■	■	■
	030	■	■	■	▲	■	★	■
	702	■	■	■	▲	■	■	■
WA	8214	■	■	■	■	★	■	■
	8255	■	■	▲	★	■	■	▲
	8005	■	■	■	■	■	★	■
	8008A	■	■	■	■	★	■	▲

备注

COMMENTS

★ 强烈推荐 high recommended ▲ 推荐 Recommended ■ 一般 Normal

更多型号可按需定制 More customized grades are available.