

水性树脂 绿色涂料 健康生活

Waterborne Resin for Green Coatings&Healthy Life



柯林达水性树脂产品

Kelinda Waterborne Resin Product

致力水性树脂先进技术，推动绿色环保水漆发展

Follow the advance of waterborne resin technology,
push forward development of environmental waterborne coatings



微信公众号

地址：广东省英德市东华镇华侨工业园新材料基地
Add: New Material Base, Huaqiao Industrial Zone, Donghua Town, Yingde, Guangdong Province.
电话 TEL: 0763-3166639/3166635 销售顾问 SALE: 18929596460
技术顾问 TECH: 18079612095/13416569054
网站 WEB: www.qykelinda.com 邮箱 EMAIL: liuhuaxi@kelinda.cc
阿里巴巴旺铺 Alibaba: kelinda.1688.com 微信公众号 Wechat: qykelinda

www.qykelinda.com

公司简介

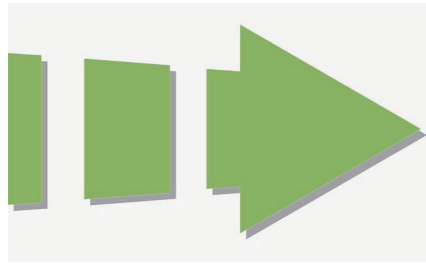
COMPANY PROFILE

清远市柯林达新材料有限公司坐落于“中国红茶之乡”——英德，是一家以水性涂料树脂产品为主导，集产品开发、生产、销售和服务为一体的国家高新技术企业。公司以广州大学为技术依托，以公司自己的技术团队为主体，专门从事水性涂料树脂的研发和生产。经过十几年的技术积累，公司成功推出了水溶性硅丙树脂、水溶性环氧改性硅丙树脂、水溶性聚酯改性硅丙树脂、水溶性聚氨酯改性硅丙树脂、水性氟碳树脂等水性烘烤涂料树脂，以及水性双组分木器漆、金属漆、塑料漆作主要成膜物的水性硅丙树脂/水性固化剂组合和单组份水性木器漆、金属漆、塑料漆做主要成膜物的交联型乳液等。产品作为水溶性金属烘烤涂料、水溶性玻璃烘烤涂料、水溶性绝缘烘烤涂料，以及水性木器漆、水性金属漆、水性塑料漆常温固化涂料的主要成膜物，已经得到了涂料客户的广泛应用。



多年来，本公司以刘晓国教授为技术团队带头人，与广州大学等多所高校、科研院所展开合作，建立了“广州大学研究生创新培养基地”和“广州市属高校产学研基地”。作为基地平台，共同培养了一批既有扎实理论基础，又有良好动手能力的研究生，技术团队公开发表论文近四十篇，获得国家发明专利十多项。同时，先后完成了多项广东省科技计划项目、教育部产学研项目。其中，水溶性硅丙树脂金属烘烤涂料和水溶性硅丙树脂绝缘漆分别获广东省科技进步三等奖。

公司一直以“务实创新、诚信经营”为宗旨，在为客户提供水性涂料树脂产品的同时，更为客户提供涂料产品的技术配方和工艺，培养水性涂料开发技术人员，全方位满足客户对技术的需求。



CATALOG

- 01** T1801水溶性硅丙树脂
T1801 water-soluble silicone acrylic resin
- 02** TP48水溶性环氧改性硅丙树脂
TP48 water-soluble epoxy modified silicone resin
- 03** TP1602水溶性聚酯改性硅丙树脂
TP1602 water-soluble polyester modified silicone resin
- 04** TG1602水溶性聚氨酯改性硅丙树脂
TG1602 water-soluble polyurethane modified silicone resin
- 05** TP1723水溶性聚酯改性低温固化树脂
TP1723 water-soluble polyester modified low temperature curing resin
- 06** TFG1603水性氟碳树脂
TFG1603 water based fluorocarbon resin
- 07** KWT1707水溶性改性硅丙树脂/G1708水性固化剂组合
KWT1707 water soluble modified silicone acrylic resin /G1708 waterborne curing agent combination
- 09** 产品介绍英文版
English version of product introduction

目录



T1801水溶性硅丙树脂

T1801 water-soluble silicone acrylic resin

【特点和用选】

本产品以有机硅预聚体、(甲基)丙烯酸酯单体为主要原料经化学聚合而成。该树脂可与部分醚化氨基树脂配合使用制备水溶性玻璃烘烤涂料。主要用于玻璃化妆品瓶、玻璃酒瓶、玻璃茶具、玻璃灯饰等表面涂装。

作为水溶性玻璃烘烤涂料主要成膜物，涂料固化速度快，漆膜附着力好、硬度高、耐溶剂性能强。

【使用方法】

水溶性硅丙树脂和325固化剂配比约为3至4:1（重量比）。作为水溶性玻璃烘烤涂料，使用时需加入树脂量的2.0-5.0%环氧基硅烷偶联剂作密着剂。根据涂装工艺的不同，调节其施工粘度。烘烤温度为150-180℃。烘烤时间为15-20分钟。



TP48水溶性环氧改性硅丙树脂

TP48 water-soluble epoxy modified silicone resin

【特点和用选】

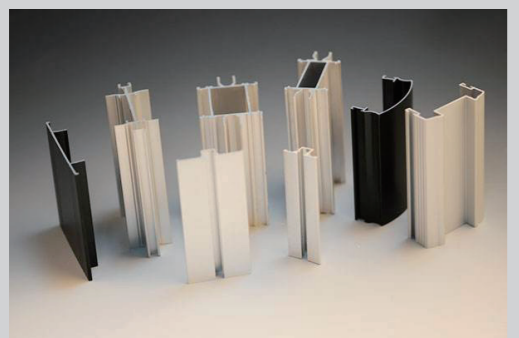
本产品以高环氧值环氧树脂、有机硅预聚体、(甲基)丙烯酸酯单体为主要原料经化学聚合而成。该树脂可与全醚化氨基树脂配合使用制备水溶性金属烘烤涂料。主要用于铝型材、不锈钢、碳钢等表面涂装。

作为水溶性金属烘烤涂料主要成膜物，涂料漆膜附着力好、硬度和柔韧性适中、耐水和耐水煮性能佳、具有良好的耐盐雾、耐老化性能。

【使用方法】

水溶性环氧改性硅丙树脂和303固化剂配比约为3-4:1（重量比），烘烤温度为：160-190℃。烘烤时间为15-20分钟。





TP1602 水溶性 聚酯改性硅丙树脂

TP1602 water-soluble polyester modified
silicone resin

【特点和用选】

采用低分子量聚酯，选择有机硅、(甲基)丙烯酸酯单体和特殊改性原料等为主要原料，经化学聚合而成。该树脂与全醚化氨基树脂配合可制备水溶性金属烘烤涂料，主要用于不锈钢、碳钢、铝材等表面涂装。

作为水溶性金属烘烤涂料主要成膜物，涂料漆膜具有附着力强、适中的硬度和良好的柔韧性、优异的耐T弯性能，且漆膜丰满度高、光泽好、可重涂。

【使用方法】

水溶性聚酯改性硅丙树脂和全醚化氨基固化剂配比约为4-6:1（重量比），烘烤温度为：170-190℃。烘烤时间为15-25分钟。



TG1602 水溶性 聚氨酯改性硅丙树脂

TG1602 water-soluble polyurethane modified
silicone resin

【特点和用选】

本产品以低分子量聚氨酯、有机硅预聚体、(甲基)丙烯酸酯单体和特殊功能单体为主要原料经化学聚合而成。

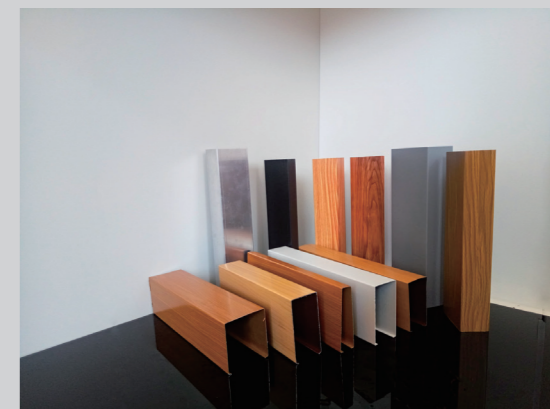
作为水溶性金属烘烤涂料主要成膜物，与全醚化氨基树脂配合制备水溶性金属滚涂烘烤涂料。漆膜具有附着力强、硬度适中、良好的耐冲击性能和耐T弯性能，丰满度高、光泽好、可重涂的优点。

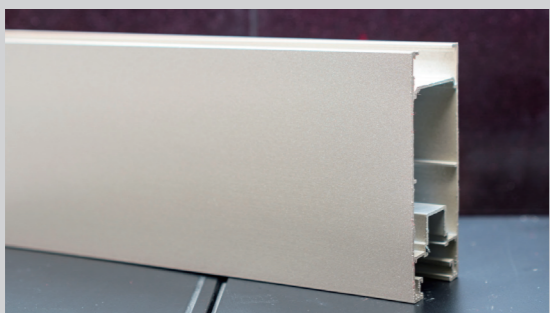
作为水溶性金属烘烤涂料主要成膜物，与部分醚化氨基树脂配合制备水溶性金属烘烤涂料。涂料具有固化速度快、硬度高、耐磨性好、且具有良好的拉伸性能、优异的耐老化性能，漆膜丰满度高、光泽好。

【使用方法】

水溶性聚氨酯改性硅丙树脂和全醚化氨基固化剂配比约为6-10:1（重量比），作滚涂涂料，烘烤温度为：220-240℃。烘烤时间为1-2分钟。

水溶性聚氨酯改性硅丙树脂和部分醚化氨基固化剂配比约为4-6:1（重量比），烘烤温度为：170-190℃。烘烤时间为15-20分钟。





TP1723水溶性 聚酯改性低温固化树脂

TP1723 water-soluble polyester modified low temperature curing resin

【特点和用选】

本产品以低分子量聚酯、有机硅预聚体、(甲基)丙烯酸酯单体和特殊功能单体为主要原料经化学聚合而成。

作为水溶性金属烘烤涂料主要成膜物，可与全醚化氨基固化剂配合，涂料漆膜具有附着力好、耐冲击性能和柔韧性优异，硬度适中，耐T弯性能、耐盐雾和耐老化性能良好，且具有可重涂的优点。

作为水溶性金属烘烤涂料主要成膜物，也可与部分醚化氨基固化剂配合。涂料可低温固化，且固化速度快。漆膜具有附着力好、硬度和柔韧性适中，耐盐雾和耐老化性能良好。

【使用方法】

水溶性聚酯改性树脂TP1723和303全醚化氨基树脂固化剂配比约为3-4:1（重量比），烘烤温度为：160-180℃。烘烤时间为15-20分钟。

水溶性聚酯改性树脂TP1723和325部分醚化氨基树脂固化剂配比约为3-4:1（重量比），烘烤温度为：130-150℃。烘烤时间为15-20分钟。



TFG1603水性氟碳树脂

TFG1603 water based fluorocarbon resin

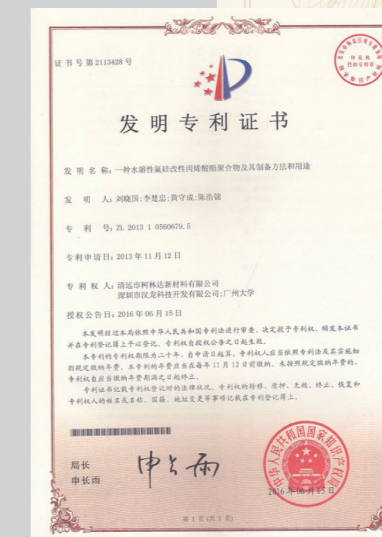
【特点和用选】

本产品以含氟原料、有机硅预聚体、(甲基)丙烯酸酯单体和特殊功能单体为主要原料经化学聚合而成。

作为水溶性金属烘烤涂料主要成膜物，与部分醚化氨基树脂325配合制备高硬度、高耐磨、快速固化的水溶性氟碳烘烤涂料。涂料固化速度快，漆膜具有附着力好、硬度高、耐冲击和拉伸性能适中，耐磨性、耐盐雾、耐老化和自清洁性能优异。

【使用方法】

水溶性氟碳树脂和325部分醚化氨基固化剂配比约为6-8:1（重量比），烘烤温度为：170-190℃。烘烤时间为15-20分钟。



序号	检测项目	检测标准	检测结果	判定
1	外观	GB/T 23443-2009	符合	合格
2	固含量	GB/T 23443-2009	73.1	合格
3	粘度	GB/T 23443-2009	17.2	合格
4	细度	GB/T 23443-2009	符合	合格
5	耐冲击性	GB/T 23443-2009	符合	合格
6	耐盐雾性	GB/T 23443-2009	符合	合格
7	耐老化性	GB/T 23443-2009	符合	合格
8	附着力	GB/T 23443-2009	符合	合格
9	柔韧性	GB/T 23443-2009	符合	合格
10	耐磨性	GB/T 23443-2009	符合	合格
11	拉伸强度	GB/T 23443-2009	符合	合格
12	断裂伸长率	GB/T 23443-2009	符合	合格
13	伸长率	GB/T 23443-2009	符合	合格

序号	检测项目	检测标准	检测结果	判定
1	外观	GB/T 23443-2009	符合	合格
2	固含量	GB/T 23443-2009	73.1	合格
3	粘度	GB/T 23443-2009	17.2	合格
4	细度	GB/T 23443-2009	符合	合格
5	耐冲击性	GB/T 23443-2009	符合	合格
6	耐盐雾性	GB/T 23443-2009	符合	合格
7	耐老化性	GB/T 23443-2009	符合	合格
8	附着力	GB/T 23443-2009	符合	合格
9	柔韧性	GB/T 23443-2009	符合	合格
10	耐磨性	GB/T 23443-2009	符合	合格
11	拉伸强度	GB/T 23443-2009	符合	合格
12	断裂伸长率	GB/T 23443-2009	符合	合格
13	伸长率	GB/T 23443-2009	符合	合格

水性常温固化涂料树脂

Water based curing coating resin at normal temperature



KWT1707水溶性改性硅丙树脂 /G1708水性固化剂组合

KWT1707 water soluble modified silicone acrylic resin
/G1708 waterborne curing agent combination

【特点和用选】

KWT1707水溶性改性硅丙树脂，以有机硅预聚体、(甲基)丙烯酸酯单体和特殊功能单体为主要原料经化学聚合而成。G1708水性固化剂主要采用异氰酸酯为原料，经多步反应聚合而成。

KWT1707与G1708配合可制备水性双组分木器漆。所制备的水性木器漆，具有施工适应性强、调色准确性好。漆膜具有良好的附着力和硬度，且具有优异的耐水性能和耐冷热性能，耐酸性、耐溶剂擦拭性能和耐老化性能良好。

【使用方法】

1、封闭底漆：KWT1707与G1708配比为：1：0.2(重量比)，混合均匀后加入40-60%乙醇稀释至涂装粘度，喷涂作封闭底漆。室温为25-30℃时，1小时后即可喷涂打磨透明底漆或实色底漆。

2、透明底漆：KWT1707中加入8.0-11.0%的透明粉、2-3%滑石粉或硬脂酸锌、加1-2%分散剂，分散、研磨均匀后，按KWT1707：G1708=1：0.2(重量比)制备成水溶性木器透明底漆。加水稀释，控制水量为：漆量：水量=1：0.2-0.3,室温为25-30℃时，3-4小时后打磨即可喷涂第二次打磨底漆或面漆。

3、面漆：KWT1707中加入一定量哑粉和分散剂，分散均匀后，按KWT1707：G1708=1：0.2(重量比)制备成水溶性木器面漆。加水稀释，控制水量为：漆量：水量=1：0.2-0.3，室温为25-30℃时，96小时后可测试漆膜性能。

MA 180021113056 IBC-MRA CNAS 中国认可 国际互认 检测 TESTING CNAS L0153 No. ST1802983

检验报告

TEST REPORT

样品名称: 水性双组份木器漆
Sample Description: _____
商标/型号: KWT1707
Brand/Model: _____
委托单位: 清远市柯林达新材料有限公司
Applicant: _____
检验类别: 委托检验
Test Type: _____

国家涂料产品质量监督检验中心(广东)
China National Quality Supervision and Testing Center for Paintings and Dopes(Guangdong)

No: ST1802983
国家涂料产品质量监督检验中心(广东)
China National Quality Supervision and Testing Center for Paintings and Dopes(Guangdong)
检验报告(Test Report)

共 2 页 第 2 页

序号	检测项目	单位	检测结果	方法 检出限	判定
1	挥发性有机化合物含量	g/L	211	2.0	合格
2	苯系物含量(苯、甲苯、乙苯和二甲苯总和)	mg/kg	<5	50	合格
3	乙二醇醚及其酯类含量(乙二醇甲醚、乙二醇甲醚醋酸酯、乙二醇乙醚、乙二醇乙醚醋酸酯和二乙二醇丁醚醋酸酯总和)	mg/kg	<5	50	合格
4	游离甲醛含量	mg/kg	<5	5	合格

广东省佛山市顺德区大良新城区德胜东路1号 Tel: 0757-22808888 Fax: 0757-22802600

Waterborne baking paint resin

T1801 Water-soluble silicone acrylic resin

[Characteristics and Application]

This product is made by chemical polymerization with the use of organosilicon prepolymer and (methyl) acrylate monomer as its main raw material. The resin can be used in combination with partially etherized amino resins to prepare water-soluble glass baking paints. It is mostly used for the main film forming material of waterborne baking paint which is the surface coating material of glass cosmetic bottles, glass wine bottles, glass tea sets, glass lamps and other glass products.

As the main film forming material of water-soluble glass baking paint, it has fast curing speed, good paint film adhesion, high hardness, and good performance of solvent resistance.

[Using Method]

The ratio of water-soluble silicone acrylic resin and 325 curing agent is about 3 - 4:1 (weight ratio). As a water-soluble glass baking paint, it should be used by adding epoxy silane coupling agent as the binder, and the adding volume is about 2.0-5.0% of the resin content. According to the different coating technology, its construction viscosity should be adjusted. The baking temperature is 150-180 °C. Baking time is 15-20 minutes.

TP48 Water-soluble epoxy modified silicone acrylic resin

[Characteristics and Application]

This product is made by chemical polymerization with the use of epoxy resin with high epoxy value, organosilicon prepolymer and (methyl) acrylate monomer as its main materials. The resin can be combined with fully etherified amino resin to prepare water-soluble metal baking paint. It is mostly used for the main film forming material of aluminum shape, stainless steel, carbon steel.

As the main film forming material of water-soluble metal baking paints, its paint film has good adhesion, moderate hardness and flexibility, good performance of water-resistance and water-boiling resistance, salt spray resistance and aging resistance.

[Using Method]

The ratio between water-soluble epoxy modified silicone acrylic resin and 303 curing agent is about 3-4: 1 (weight ratio). The baking temperature is : 160-190 °C, and the baking time is 15-20 minutes.

TP1602 Water-soluble polyester modified silicone acrylic resin

[Characteristics and Application]

This product is made by chemical polymerization with the use of organosilicon, (methyl) acrylate monomer and special modified raw materials as its main materials. The resin can be used to prepare water-soluble metal baking coating with fully etherified amino resin. It is mostly used for the main film forming material of stainless steel, carbon steel, aluminum material, etc.

As the main film forming material of water-soluble metal baking paint, its paint film has strong adhesion, moderate hardness, good flexibility and T-bend, and it has high fullness, good gloss and can be repainted.

[Using Method]

The ratio between water-soluble polyester modified silicone acrylic resin and fully etherified amino curing agent is about 4-6: 1 (weight ratio). The baking temperature is: 170-190 °C and the baking time is 15-25 minutes.

TG1602 Water-Soluble Polyurethane modified silicone Acrylic Resin

[Characteristics and Application]

This product is made by chemical polymerization with the use of low molecular weight polyurethane, silicone prepolymer, (methyl) acrylate monomer and special functional monomer as its raw materials.

As the main film forming material of water-soluble metal baking coatings, it can be used in combination with fully etherized amino resins to prepare water-soluble glass baking paints. Its paint film has the advantages of high adhesion, moderate hardness, good performance of impact resistance and good T-bending resistance, high fullness, good gloss and it can be recoated.

As the main film forming material of water-soluble metal baking coatings, it can be used in combination with partly etherized amino resins to prepare water-soluble glass baking paints. Its paint film has high curing speed, high adhesion, high hardness, good performance of impact resistance, tensile property, aging resistance and it has high fullness and good gloss.

[Using Method]

The ratio between the water-soluble polyurethane modified silicone and the fully etherified amino curing agent is about 6-10:1 (weight ratio), and it is used as a roll coating material. The baking temperature is 220-240 C. and the baking time is 1-2 minutes.

The ratio between water-soluble polyurethane modified silicone resin and partially etherified amino curing agent is about 4-6:1 (weight ratio).The baking temperature is 170-190 °C and the baking time is 10-15 minutes.

TP1723 water-soluble polyester modified low temperature curing resin

[Characteristics and Application]

This product is made by chemical polymerization with the use of low molecular weight polyester, organosilicon prepolymer, (methyl) acrylate monomer and special functional monomer as its main materials.

As the main film forming material of water-soluble metal baking paint, the resin can be used to prepare water-soluble metal baking coating with fully etherified amino resin. The paint film has good adhesion and impact resistance, excellent flexibility, moderate hardness, good salt spray resistance and aging resistance, and has the advantages of being recoated.

As the main film forming material of water-soluble metal baking paint, the resin can be used to prepare water-soluble metal baking coating with partially etherified amino resin. The paint can be cured at low temperature, and the curing speed is fast. The paint film has excellent adhesion, moderate hardness and flexibility, good performance on salt spray resistance and aging resistance.

[Using Method]

The ratio between water-soluble polyester modified resin and 303 fully etherified amino resin curing agent is about 3-4: 1 (weight ratio). The baking temperature is 160-180 °C and the baking time is 15-20 minutes.

The ratio between water-soluble polyester modified resin and 325 partially etherified amino resin curing agent is about 3: 4: 1 (weight ratio). The baking temperature is 130-150 °C, and the baking time is 15-20 minutes.

TFG1603 Waterborne Fluorocarbon Resin

[Characteristics and Application]

This product is made by chemical polymerization with the use of fluorine-containing raw materials, organosilicon prepolymer, (methyl) acrylate monomer and special functional monomer as its raw materials.

As the main film forming material of water-soluble metal baking paint, it is combined with partially etherified amino resin to make the water soluble fluorocarbon baking paint with high hardness, high wear resistance and fast curing. The paint has good adhesion, high hardness, salt spray resistance, aging resistance and self cleaning.

[Using Method]

The ratio between water-soluble fluorocarbon resin and 325 partially etherified amino curing agent is about 6-8: 1 (weight ratio) while its baking temperature is: 170-190 °C and baking time is 15-20 minutes.

Waterborne curing paint resin at normal temperature

Combination of KWT1707 Water-soluble modified silicone acrylic resin and G1708 waterborne curing agent

[Characteristics and Application]

KWT1707 water-soluble modified silicone acrylic resin is formed by chemical polymerization with the use of organosilicon prepolymer, (methyl) acrylate monomer and special functional monomer as the main raw materials. G1708 water curing agent mainly use the isocyanate as its raw material and is polymerized by multistep reaction.

Water-borne two-component wood lacquer can be made by the combination of KWT1707 and G1708 and it has strong application adaptability and accurate color adjustment. Its paint film has good adhesion, high hardness, good cold water and heat resistance, acid and alkaline resistance, solvent resistance and aging resistance.

[Using Method]

1. Sealing primer: the ratio between KWT1707 and G1708 is 1:0.2 (weight ratio). After they are mixed evenly, dilute it to the coating viscosity by adding 40-60% ethanol, which can be sprayed as sealing primer. After 1 hour at room temperature of 25-30 °C, it can be sprayed as the transparent polishing primer or solid color primer.

2. Transparent primer: Transparent primer of water-borne wood lacquer is prepared by adding 8.0-11.0% transparent powder, 2-3% talcum powder or zinc stearate, adding 1-2% dispersant into the KWT1707. After they are mixed evenly, they are made into transparent primer of water-borne wood lacquer according to the weight ratio of KWT1707:G1708=1:0.2. Add water to dilute it, and control ratio between paint and water as 1: 0.2-0.3. After 3-4 hour's grinding at room temperature of 25-30 °C, it can be sprayed as the second polishing primer or finishing paint.

3. Finishing paint: Through adding a certain amount of matting agent and dispersant into KWT1707, the water soluble wood finishing paint is made according to the ration of KWT1707:G1708=1:0.2 (weight ratio). Add water to dilute it, and control ratio between paint and water as 1: 0.2-0.3, Make sure the room temperature is 25-30°C, and its paint film performance can be tested after 96 hours.