

Product description:

Polyester resin is a new type of solvent-free, 100% solid powder coating. It is mainly composed of polyols and polyacids through polycondensation. Polyester resin serves as the main film-forming material. This coating possesses many excellent characteristics, such as solvent-free, pollution-free, energy-saving, labor-saving, and high mechanical strength of the coating film. Additionally, it exhibits good weatherability, resistance to yellowing during baking and curing, excellent physical properties like impact resistance, flexibility, and hardness, as well as good resistance to chemicals and water.

Polyester resin has a wide range of applications, especially in metal coating. It can effectively protect and beautify metal surfaces. It is commonly used for the coating of steel structures, aluminum products, copper products, galvanized steel sheets, and other metal products.

Hybrid polyester resin for epoxy resin cure (50/50)						
Type	Acid Value	Viscosity mPa.s/200°C	Softening Point °C	Tg °C	Curing Condition °C/min	Properties
	(mgKOH/g)					
S5011	68-75	2000-3000	100- 110	≥54	180/ 15	Excellent leveling and gloss
S5022	68-75	1800-2800	100- 110	≥53	180/ 15	Excellent mechanical properties with good leveling and gloss. Universal type
S5022R	68-75	2500-4500	100- 110	≥53	180/ 15	Good leveling and mechanical properties. Economy type
S5022M	68-75	4000-6000	105- 115	≥56	180/ 15	High Tg, strong three-dimensional sense, mainly used for art texture powder coating
S5022X	68-75	1800-2800	100- 110	≥53	190/ 15	Good balance between leveling and mechanical properties, good extinction property, suitable for extinction powder coatings
S5022T	58-70	2500-4500	100- 115	≥53	190/ 15	Good flexibility and bending, good delay impact performance, suitable for matting powder coating

Hybrid polyester resin for epoxy resin cure (60/40)						
Type	Acid Value	Viscosity mPa.s/200°C	Softening Point °C	Tg °C	Curing Condition °C/min	Properties
	(mgKOH/g)					
S6011	48-55	2000-4000	100- 110	≥52	180/ 15	Excellent leveling and gloss
S6022	48-55	2500-4000	100- 110	≥54	180/ 15	Good leveling, gloss and mechanical properties
S6022M	48-55	3000-5000	100- 115	≥56	180/ 15	High Tg, strong three-dimensional sense, mainly used for art texture powder coating
S6022X	48-55	2000-3500	100- 110	≥53	190/ 15	Good balance between leveling and mechanical properties, suitable for matting powder coating
S6022T	48-55	2000-4000	100- 110	≥52	190/ 15	Good leveling, suitable for extinction powder coatings (10-15)

Hybrid polyester resin for epoxy resin cure (70/30)						
Type	Acid Value	Viscosity mPa.s/200°C	Softening Point °C	Tg °C	Curing Condition °C/min	Properties
	(mgKOH/g)					
S7018	28-35	3000-5000	100- 110	≥52	180/ 15	Excellent leveling and gloss
S7018C	28-35	3000-5000	105- 115	≥54	180/ 15	Good leveling, gloss and mechanical properties
S7018A	28-35	4000-6000	105- 115	≥54	180/ 15	High Tg, strong three-dimensional sense, mainly used for art texture powder coating
S7018D	28-35	3000-5000	100- 110	≥52	180/ 15	Good balance between leveling and mechanical properties, suitable for matting powder coating

Outdoor polyester resin for TGIC cure						
Type	Acid Value	Viscosity mPa.s/200°C	Softening Point °C	Tg °C	Curing Condition °C/min	Properties
	(mgKOH/g)					
S9068	30-38	3000-5000	110- 120	≥63	200/ 10	93/7, good leveling, gloss and weather resistance
S9068A	30-38	4000-6000	110- 120	≥63	200/ 10	93/7, good leveling, excellent mechanical properties, also suitable for outdoor transfer powder coating
S9068D	27-35	4500-6500	110- 120	≥62	200/ 10	94/6, good leveling and flexibility, excellent mechanical properties
S9068X	30-38	3000-5000	110- 120	≥62	200/ 15	93/7, good leveling and gloss, also suitable for extinction powder coatings
S9068E	27-35	4000-6000	110- 120	≥62	200/ 10	94/6, good leveling and mechanical properties
S9934	30-38	4000-6000	110- 120	≥63	200/ 10	93/7, gas-resistant furnace type, good weather resistance and sand grain effect
S9935-4	30-38	3000-5000	110- 120	≥64	200/ 10	93/7, excellent weather resistance and good leveling
S9068U	30-35	3500-5500	110- 120	≥62	200/ 10	93/7, outstanding bending resistance, used for coiled material

Tips: All types can be customized, including environmentally-friendly type and gas-resistant furnace type.

TGIC

Products Discription

TGIC is an isocyanurate based crystalline polyepoxide compound. Its molecular weight is 297 (CAS Number:2451-62-9). It has good heat resistance, weather resistance, adhesive and high temperature performance.

Applications

Used as cross-linked hardener for pure polyester powder coatings, the rate is about 6%-10% of the polyester weight (depending on acid value), for manufacturing electrical insulation materials, laminate, printed circuit, all kinds of facilities, plastic stabilizer, leather softness modification, pharmaceutical intermediates, high performance insulating electrical materials, cross-inking curing agent of PCB ink.

Items	Melting Range (°c)	Epoxy Equivalent (mol/100g)≤	Chlorine Content (eq/100g)≤	ECH Content (ppm)≤	Volatile (%)	Appearance	Characteristic
TC-77	95~125	≤110	≤0.6	≤250	0.5	White granule (Cylindrical shape)	For pure polyester resin Powder Coatings, plastic stabilizer
TC-810	95~125	≤110	≤0.6	≤250	0.5	White granule (Tablet shape)	For pure polyester resin Powder Coatings, plastic stabilizer, Low allergy
TC-77B	95~125	≤106	≤0.4	≤200	0.5	White granule (Cylindrical shape)	For laminate, Leather softness, modification, high-end pure polyester resin powder coatings
TC-77C	95~125	≤105	≤0.08	≤50	0.45	White granule (Cylindrical shape) / powder	For high-end electronic ink
TC-77D	150~160	≤104	≤0.05	≤50	0.45	White granule (Cylindrical shape) / superfine powder	For High Temperature resistance electronic ink

Package: Available in PE bag, with net weight of 25kgs/bag. Available in carton bag, with net weight of 10kgs or 20kgs/bag.

Product description:

Epoxy resin for powder coating is thermosetting resin that is widely used in adhesives, coatings, insulating materials, and advanced composite materials due to its excellent adhesion properties, low cost, good insulation performance, and environmental friendliness.

It has significant advantages in electrical insulation, electronic component protection, and metal surface corrosion prevention. Its high dielectric strength and volume resistivity enable effective isolation of electric current and electric fields, providing excellent insulation performance. Furthermore, epoxy resin can withstand high temperatures without melting or deforming exhibiting outstanding heat resistance. Additionally, the coating can effectively prevent chemical substances, acids, alkalis, and solvents from causing damage, protecting the substrate from harm.

Technical Data of One-step Bisphenol A Epoxy Resin Series

Type	Softening Point °C	Epoxy Equivalent g/mol	Organic Chlorine mol/100g	Inorganic Chlorine mol/100g	Characteristics
ER-12	88-95	725-870	≤0.0028	≤0.0005	Suitable for pure epoxy or mixed in-door thermosetting powder coatings, good leveling under 91°C, good general capacity between 92-93°C, good flexibility above 94°C, especially for art powder coatings
ER-14	89-93	700-752	≤0.0020	≤0.0005	Suitable for high function and good film adhesion of low temperature curing pure epoxy or mixed powder coatings
ER-20	65-75	450-550	≤0.0025	≤0.0005	Suitable for copper clad laminate, electrophoretic paint and anti-corrosive floor paint
ER-12D	89-92	725-833	≤0.0030	≤0.0005	1.Suitable for normal gloss pure epoxy powder or mixed thermosetting powder coatings, best for pure epoxy ultra low matte or semi gloss powder coatings 2.Not suitable for powder coatings of high boiling requirement
ER-12BLP	88-95	770-870	≤0.0030	≤0.0005	1.Including 10% acylic leveling agent,suitable for high leveling pure epoxy or mixed thermosetting powder coatings 2.Need no more any leveling agent in formula

Technical Data of Two-steps Bisphenol A Epoxy Resin Series

Type	Softening Point °C	Epoxy Equivalent g/mol	Organic Chlorine mol/100g	Inorganic Chlorine mol/100g	Characteristics
ER-03H	90-95	740-800	≤0.0005	≤0.0003	1.Suitable for high gloss, high leveling pure epoxy or mixed thermosetting powder coatings and matte, semi-gloss pure epoxy or mixed thermosetting powder coatings 2.Good water boiling resistance
ER-04H	99-109	850-1000	≤0.0005	≤0.0003	1.Suitable for pure epoxy anti-corrosive thermosetting powder coatings of tap water, naturalgas and oil valves, Heteromorphic materials and pipings 2.Good flexibility

Technical Data of Heavy Anti-corrosion Phenolic Hydroxyl Curing Agent

Type	Softening Point °C	Hydroxy Equivalent g/mol	Viscosity (150°C, cps)	Color (G)	Characteristics
ER-01	100-110	200-300	5000-10000	≤1.0	1.Suitable for pure epoxy anti-corrosive thermosetting powder coatings of tap water, natural gas and oil valves, Heteromorphic materials and pipings 2.Good flexibility andanti-corrosion

Thermoplastic Solvent Based Acrylic resin

Type	Solid Content	Acid Number (mgKOH/g)	TG (°C)	Viscosity 25°C G.H	Volatile substances	Properties & Performance	Application
RS208	50±1	<5	50	W-Y	Toluene, butyl acetate	Good adhesion and flexibility to metal and plastic materials, curing agent can be added or not	PU primer anticorrosive paint
RS212	50±1	<8	50	Z1-Z4	Toluene, xylene	Good weather resistant in outdoor, High hardness	Road marking paint, steel structure anti-corrosion topcoat
RS216	50±1	<8	70	Y-Z2	Xylene, S100#	Good Adhesion on metal and stone, Water resistant	Engineering machinery, outdoor building protective paint, marble varnish
RS228	50±1	<5	70	Z4-Z7	Toluene, isobutanol	Good adhesion on plastic, Good Aluminum powder alignment	3C
RS278	50±1	<6	93	Z1-Z4	Toluene, isobutanol	High hardness, water resistance, good alcohol resistance, Good aluminum powder alignment	Metallic mixed color paint for plastic

Hydroxyl Solvent Based Acrylic resin

Type	Solid Content	Acid Number (mgKOH/g)	Hydroxyl value	Viscosity 25°C G.H	Volatile substances	Properties & Performance	Application
HA713	50±1	<5	33	Z-Z3	Toluene, butyl acetate	Good adhesion on metal and plastic, Good pigment dispersion, Good weather resistant	Color paint, vehicle repair paint (Intermediate paint), construction machinery
HA718	65±2	<10	60	Z1-Z4	Toluene	Good Hardness and gloss, general product	Mechanical anticorrosive paints, two-component wood topcoats, automotive repair paints

Hydroxyl Solvent Based Acrylic resin

Type	Solid Content	Acid Number (mgKOH/g)	Hydroxyl value	Viscosity 25°C G.H	Volatile substances	Properties & Performance	Application
HA728	60±2	<8	48	Z1-Z3	Toluene, xylene, Butyl acetate	Good adhesion on metal and plastic, Good pigment dispersion good weather resistant, good chemical resistant	Plastic parts, construction machinery, bridges
HA748	60±2	<13	60	Z-Z3	Toluene, butyl acetate	Epoxy modified, high gloss, good workability, good metal adhesion, salt spray resistance	Chemical pipelines, metal floor paint
HA758	70±2	<12	70	Z2-Z5	Xylene	High gloss, good fullness, alcohol resistance, varnish resin	Paints and varnishes, automotive refinishes

Thermosetting Solvent-based Acrylic resin

Type	Solid Content	Acid Number (mgKOH/g)	Viscosity 25°C G.H	Volatile substances	Properties & Performance	Application
RG508	60±2	<6	W-Z1	Xylene, n-butanol, S100#	Good adhesion, good pigment dispersion, general purpose	Industrial paint
RG520	64±2	<6	Z2-Z5	Xylene, n-butanol	Boiling resistance, heat resistance, salt spray resistance good adhesion to stainless steel, single coating	Industrial paint, one coat of bus and truck wheels
RG528	60±2	80-90	Z2-Z4	Xylene, n-butanol	High gloss, high hardness, excellent plating adhesion, corrosion resistance	Electroplating varnish, water electroplating faucet, door handle
RG540	55±1	<8	Z1-Z4	Ethylene glycol butyl ether, n-butanol	Resistant to cooking, good flexible, good adhesion to stainless steel and aluminum	Can coating
RG558	70±2	<12	Y-Z3	Xylene propylene glycol methyl ether acetate	High gloss and good fullness, good weather resistant	High-grade amino baking varnish or paint

Solid Thermoplastic Acrylic Resin

Type	Molecular Weight(MW)	TG (°C)	Acid Number (mgKOH/g)	Application	Equivalent Type
TP-11	85,000	100	≤1.0	Marine coating, plastic coating, and silk screen printing inks, thermal transfer ink	Paraloid A-11 Lucite 2011
TP-24	160,000	32	≤1.0	Printing inks, primers, ceramic transfer lacquers, heat sealing lacquers for aluminum foils and adhesives	Dianal BR117 Degussa P24
TP-44	100,000	60	≤2.0	Modified PVDF coatings, metal, plastic and concrete coatings, coil coatings	Paraloid B-44
TP-60	40,000	75	10	Plastic coatings, printing inks, metal coatings	Paraloid B-60 Dianal BR-106/113
TP-66	50,000	50	6.5	Marine coating, plastic coating, gravure inks, silk screen printing inks	Paraloid B-66 Dianal BR-116
TP-99	20,000	113	/	Hot process stamping	Paraloid B99N
TP-611	50,000	32	≤1.0	Low-odor building protective coating, protective coating, aluminum heat sealing varnish, printing ink, paperboard ink, ceramic thermal transfer ink, etc	Degussa PQ611
TP-115	40,000	55	≤1.0	Plastic coating and UV ink	Dianal BR115
TP-116	40,000	60	6.5	Plastic Paints, Wood Paints, Printing Inks	Dianal BR116 Degussa 64/12 Neocryl B725
PT-10AB	90,000	55	≤1.0	Marine coating, plastic coating, gravure inks, silk screen printing inks	Paraloid A-10 Lucite 2010
PT-67	200,000	55	≤1.0	Gilding material coatings (adhesive layer), metal coatings, alkyd modified coatings and etc	Paraloid B-67 Lucite 2045

Solid Thermoplastic Acrylic Resin

Type	Molecular Weight(MW)	TG (°C)	Acid Number (mgKOH/g)	Application	Equivalent Type
PT-2952	90,000	85	≤ 1.0	Plastic, Paper, Metal paints and Inks etc	Neocryl B804 Dianal 2592
TP-3728	65,000	110	4-7	Plastic coating, toys paint	Neocryl B-728
TP-3811	40,000	105	4.5-6.5	Plastic coating, PVC inks, Peeling coat on PET film	Neocryl B-811
TPR-30	30,000	55	≤6	Alcohol printing ink	/
TPR-38	240,000	38	6	Cigarette pack ink and ceramic transfer ink	/
TPR-55	30,000	55	≤1.0	Spray paint, paper paint, road marking paint, Ribbons	/
TRP-56	55,000	52	≤1.0	Screen printing ink	/
TP-301	62,000	59	18-35	Exterior Coating, Fire-ratardant Coating	/
TP-302	62,000	52	3-6	Industry Coating, Floor coating	/
TP-304	70,000	55	18-35	Road marking Paint, Floor coating	/
TP-305	69,000	78	3-6.5	Anti-Corrosive Coating, Fire-Retardant Coating	/
TP-306	58,000	85	3-6	Anti-Corrosive Coating, Industrial Coating	/
TP-310	42,000	50	14-20	Industrial Coating, Container Coating, Machinery enamel	/

Polyamide Resin Co-solvent Soluble

Other name: Toluene soluble polyamide resin

Benzene soluble polyamide resin

Appearance: Light yellow granular or crushed solid.



Properties

iSuoChem® polyamide resin offers excellent adhesion, moderate softening point, excellent water resistance, chemical resistance, good solubility in the mixed solution of benzene and alcohol, modulate ink applicability, time-saving, good fluidity and high fastness to print materials.

Application

Be used for various gravure printing ink for plastic, varnish and seal coating, suitable for low speed and high speed printing press.

iSuoChem® DT556 is specially developed for raising adhesion, can be used jointly with other grades, also can be used directly for untreated film, regenerated film and treated film which is less than 38 dyne of corona treatment.

Specifications

Type	DT501	DT501H	DT508	DT588	DT556
Viscosity (mPa.s/25°C)	100~150	150~230	120~180	100~170	30-100
Softening point (°C)	110~130	110~130	110~200	100~120	85~105
Freezing point (°C)	< 7	< 7	/	0 ~ -8	/
Color (#)	7 max	7 max	7 max	7 max	13 max
Acid Value (mg KOH/g)	5 max	5 max	5 max	6 max	15 max
Amine Value (mg KOH/g)	5 max	5 max	5 max	6 max	3 max
High temperature resistance (°C)	/	/	100~150	/	/

Remark: 1. Viscosity can be customized according to your request.

2. For winter use, we could deal with it as customer's request, and add "W" on the end of type number.

Polyamide Resin Alcohol soluble



Appearance: Light yellow granular or crushed form.

Properties

iSuoChem® alcohol soluble type of polyamide resin offers excellent alcohol solubility, good compatibility with nitrocellulose, superior freezing resistance, water resistance, anti-gelling properties, high gloss, good flow and pigment wettability, good adhesion to base material.

Application

It's developed for high-speed flexible plastic printing ink, flexographic ink, anastatic ink, seal coating, beaded paint, etc.

Specifications

Type NO.	DT610	DT610H	DT610A	DT6245	DT636A
Viscosity mPa.s/25°C	60~100	100~150	80~150	100~200	200~1000
Softening point °C	100~130	100~130	100~130	140~160	160~180
Freezing point °C	0 ~ 3	0 ~ 3	0 ~ -5	/	/
Color #	7 max	7 max	7 max	7 max	12max
Acid Value mg KOH/g	5 max	5 max	5 max	6 max	15 max
Amine Value mg KOH/g	4 max	4 max	5 max	6 max	15 max
High temperature Resistance °C	/	/	/	140~160	150min

Remark: Viscosity can be customized according to your request.