

REAFREE® 6818

POWDER COATINGS / HYBRID

TECHNICAL DATA SHEET

Product Application details Saturated carboxylated polyester suitable for the formulation of low temperature curing decorative and protective thermosetting powders in combination with epoxy resins.
Non catalysed resin.

Performance Benefits

- Good flow.
- High salt spray resistance.
- Good mechanical properties.
- Good recoatability.

Polymer Type

- Saturated Carboxylated Polyester Resin

Sales Specifications	Colour (50%), (ASTM D-1544)	3 max
	Acid value, mg KOH/g (ASTM D-1639)	90 - 100
	Viscosity 165°C, Pa.s (ICI – DIN 53229)	5 - 15

Other Characteristics¹	Appearance	Pale granules
	Glass Transition T, °C (DSC - Tg)	approx 54

1 The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications

Curing Conditions 15 minutes at 135°C (object temperature)
(With REAFREE C4705-10)

Recommended Mixing Ratio REAFREE 6818 / Epoxy : 50/50

Starting Formulation

REAFREE 6818	300
REAFREE C4705-10	46
Titanium Dioxide ⁽¹⁾	323
Epoxy resins ⁽²⁾	318
Flow modifier ⁽³⁾	10
Benzoin	3

(1) Kronos 2160
(2) DER 662 E (Dow Chemical)
(3) Byk 360 P (Byk Chemie)

Formulation Guidelines

Application / Extrusion Conditions

Extruder: BUSS PCS-30
Torque: 40%
Speed: 200 rpm
Extrusion temperature: 80°C
Spraying Gun: GEMA PG 1-B
Application voltage: 60-80 Kv
Test substrate: Degreased steel 1 mm

Coating Properties

Film thickness: 60-80 microns
Gloss 60°, (ASTM D-523-60E): Over 90%
Cupping test, (DIN 53156): Over 8 mm
Direct Impact, (ASTM D-2794): Over 80 Kg.cm
Reverse Impact, (ASTM D-2794): Over 80 Kg.cm
Conical mandrel, (ASTM D-522): 100%
Adhesion, (DIN 53151): Gt0

Product Safety

Please refer to the corresponding Safety Data Sheet.

Delivery form

Granules. White opaque polyethylene bags of 25 Kg. One Ton pallet shrink – wrapped.

Storage & Handling

The resin in its original unopened bags is stable for more than three years, stored in a dry place at temperature below 30°C. Avoid direct sunlight.

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