

TECHNICAL DATA SHEET

REAFREE® 6818

Powder Resins / Saturated Carboxylated Polyester / Epoxy



Low / Ultra Low Temperature Cure

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.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Acid value	90-100 mg KOH/g	ASTM D-1639
Viscosity (Cone and plate - 165°C)	5-15 Pa.s	DIN 53229
Color (50%)	3 max Gardner	ASTM D-1544

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Appearance	Pale granules	
Glass transition temperature (T _g)	approx 54 °C	DSC

¹The 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

MARKET & APPLICATIONS

Coatings & Inks

- Industrial Coating
 - General Industry
 - Metal Interior - Powder
 - Wood Furniture
 - Industrial Wood Finishes

PERFORMANCE BENEFITS

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

REAFREE® 6818

FORMULATION GUIDELINES

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)

APPLICATION / EXTRUSION CONDITIONS

CHARACTERISTICS	
Extruder	BUSS PCS-30
Spraying gun	GEMA PG 1-B
Torque	40 %
Extrusion speed	200 rpm
Application voltage	60-80 kV
Test substrate (Degreased steel)	1 mm
Extrusion temperature	80 °C

COATING PROPERTIES

	CHARACTERISTICS	METHODS
Film thickness	60-80 microns	
Gloss (60°)	Over 90 %	
Cupping test	Over 8 mm	DIN 53156
Direct impact	Over 80 kg.cm	ASTM D-2794
Reverse impact	Over 80 kg.cm	ASTM D-2794
Conical mandrel	100 %	ASTM D-522
Adhesion	Gt0	DIN 53151

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 AND 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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