

## TECHNICAL DATA SHEET

# REAFREE® 6818

Powder Resins / Saturated Carboxylated Polyester / Epoxy

### 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 CHARACTERISTICS<sup>1</sup>

	CHARACTERISTICS	METHODS
Appearance	Pale granules	
Glass transition temperature (T <sub>g</sub> )	approx 54 °C	DSC

<sup>1</sup>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

### MARKET

#### Coatings & Inks

- Industrial Coating
  - General Industry
  - Wood Furniture

### 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 <sup>(1)</sup>	323
Epoxy resins <sup>(2)</sup>	318
Flow modifier <sup>(3)</sup>	10
Benzoin	3

<sup>(1)</sup> Kronos® 2160

<sup>(2)</sup> DER™ 662 E (Dow Chemical)

<sup>(3)</sup> 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.

Arkema Coating Resins  
410 Gregson Dr.  
Cary, NC 27511 – USA  
T +1 919 469 6700

Arkema Química, S.A.U.  
Ctra. Olzinelles, s/n  
E-08470 Sant Celoni (BCN)  
Spain  
T +34 938 674 000

Arkema Chemical India Private Ltd.  
D-43, Trans Thane Creek  
MIDC Industrial Area  
400706 Mumbai - India  
T +91 22 67377122

Headquarters: Arkema France  
420, rue d'Estienne d'Orves  
92705 Colombes Cedex  
France  
T +33 (0)1 49 00 80 80

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