

## TECHNICAL DATA SHEET

# REAFREE® 6694

Powder Resins / Saturated Carboxylated Polyester / Epoxy

## **PRODUCT APPLICATION DETAILS**

Saturated carboxylated polyester suitable for the formulation of decorative and protective thermosetting powders in combination with epoxy resins. .

#### **SALES SPECIFICATIONS**

	CHARACTERISTICS	METHODS
Acid value	50-56 mg KOH/g	ASTM D-1639
Viscosity (Cone and plate - 165°C)	14-20 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 (Tg)	approx 55 °C	DSC

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

#### **CURING CONDITIONS**

10 minutes at 190°C (object temperature)

#### **RECOMMENDED MIXING RATIO**

REAFREE® 6694 / Epoxy: 60/40

#### **MARKET**

#### **Coatings & Inks**

- Industrial Coating
  - Appliance
  - General Industry
  - Metal Interior Powder

#### **PERFORMANCE BENEFITS**

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



# REAFREE® 6694

#### **FORMULATION GUIDELINES**

	STARTING FORMULATION	
REAFREE® 6694	363	
Titanium Dioxide <sup>(1)</sup>	334	
Epoxy resins (2)	263	
REAFREE® F3300-A15	37	
Benzoin	3	

<sup>(1)</sup> Kronos® 2160

#### **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 94 %	
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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<sup>(2)</sup> Araldite® GT-7004 (Huntsman) DER™ 663 UE (Dow Chemical) Epikote® 3003 (Resolution)