

TECHNICAL DATA SHEET

REAFREE® 6689

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. Medium reactive type.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Acid value	47-53 mg KOH/g	ASTM D-1639
Viscosity (Cone and plate - 165°C)	10-20 Pa.s	DIN 53229
Color (50%)	2 max Gardner	ASTM D-1544

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Appearance	Pale granules	
Glass transition temperature (Tg)	approx 53 °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

12 minutes at 180°C (object temperature)

RECOMMENDED MIXING RATIO

REAFREE® 6689 / 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® 6689

FORMULATION GUIDELINES

STARTING FORMULATION	
REAFREE® 6689	363
Titanium Dioxide ⁽¹⁾	334
Epoxy resins ⁽²⁾	263
REAFREE® F3300-A15	37
Benzoin	3

⁽¹⁾ Kronos® 2160
⁽²⁾ Araldite® GT-7004 (Huntsman) DER™ 663 UE (Dow Chemical) Epikote® 3003 (Resolution)

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.

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
---	--	---	--

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.
Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790