

REAFREE® 6419

POWDER COATINGS / HYBRID

TECHNICAL DATA SHEET

Product

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

Application details

TMA free type.

Performance Benefits

- Very 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)	30 - 37
Viscosity 165°C, Pa.s (ICI – DIN 53229)	17- 30

Other Characteristics¹

Appearance	Pale granules
Glass Transition T, °C (DSC - Tg)	approx 59

¹ The 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 6419 / Epoxy : 70/30

Starting Formulation

REAFREE 6419	438
Titanium Dioxide ⁽¹⁾	334
Epoxy resins ⁽²⁾	188
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

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 94%
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

Formulation Guidelines

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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The logo for ARKEMA, featuring the word "ARKEMA" in a bold, sans-serif font. The letters "A", "R", "K", "E", and "M" are in a dark blue color, while the letter "A" at the end is in a light green color.