

TECHNICAL DATA SHEET

REAFREE® 8483

Powder Resins / Saturated Carboxylated Polyester / β -Hydroxyalkylamide

PRODUCT APPLICATION DETAILS

Saturated carboxylated polyester for combination with β -Hydroxyalkylamide type hardeners. Suitable for the formulation of outdoor durable thermosetting powders with corrosion protective properties. Gas oven stabilised. TMA free type.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Acid value	26-30 mg KOH/g	ASTM D-1639
Viscosity (Cone and plate - 165°C)	25-60 Pa.s	DIN 53229
Color (50%)	2 max Gardner	ASTM D-1544

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Appearance	Pale granules	
Glass transition temperature (T _g)	approx 63 °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

10 minutes at 180°C (object temperature)
12 minutes at 160°C (object temperature)

RECOMMENDED MIXING RATIO

REAFREE® 8483 / PRIMID XL-552⁽¹⁾: 96/4
REAFREE® 8483 / PRIMID QM-1260⁽¹⁾: 95,5/4,5
⁽¹⁾ EMS-Chemie AG

MARKET & APPLICATIONS

Coatings & Inks

- Industrial Coating
 - General Industry
 - Metal Exterior - Powder

PERFORMANCE BENEFITS

- Good mechanical properties.
- Excellent corrosion protection.
- Good yellowing resistance curing with direct-fired gas ovens.

REAFREE® 8483

FORMULATION GUIDELINES

STARTING FORMULATION	
REAFREE® 8483	569
Titanium Dioxide ⁽¹⁾	320
β-Hydroxyalkylamide ⁽²⁾	24
REAFREE® F3300-R10	75
Benzoin	2
CRAYVALLAC® PC	12

⁽¹⁾ Kronos® 2160

⁽²⁾ Primid® XL-552 (EMS 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	105 °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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