REAFREE®

TECHNICAL DATA SHEET

REAFREE® 8784

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 and protective thermosetting powders for electrostatic application. For matt powder coatings by dry blending. Gas oven stabilised. TMA free type.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Acid value	47-52 mg KOH/g	ASTM D-1639
Viscosity (Cone and plate - 165°C)	18-38 Pa.s	DIN 53229
Color (50%)	2 max Gardner	ASTM D-1544

OTHER CHARACTERISTICS[1]

	CHARACTERISTICS	METHODS
Appearance	Pale granules	
Glass transition temperature (Tg)	approx 68 °C	DSC

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

CURING CONDITIONS

TGIC: 10 minutes at 200°C (object temperature)
PRIMID(1): 10 minutes at 180°C (object temperature)
PRIMID(1): 20 minutes at 160°C (object temperature)
(1) EMS-Chemie AG

RECOMMENDED MIXING RATIO

REAFREE® 8784 / TGIC: 90/10
REAFREE® 8784/ PRIMID XL-552(1): 93/7
(1) EMS-Chemie AG

MARKET

Coatings & Inks

- Industrial Coating
  - General Industry
  - Metal Exterior - Powder

PERFORMANCE BENEFITS

- Good flow.
- For matt finishes by dry-blending with REAFREE 8304.
- Good mechanical properties.
- Excellent outdoor durability.
- Good yellowing resistance.

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FORMULATION GUIDELINES

	STARTING FORMULATION	
	A	**B**
REAFREE® 8784	-	583
REAFREE® 8304	608	-
Titanium Dioxide [1]	319	317
ß-Hydroxyalkylamide [2]	19	44
CRAYVALLAC® WN-1495	10	10
Flow modifier [3]	10	10
Benzoin	2	2
Barium sulfate	32	34

[1] Kronos® 2160
[2] Primid® XL-552 (EMS Chemie)
[3] Resiflow PV-88 (Worlée)

DRY-blend paints A/B: 50/50

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°)	approx. 28 %	
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 30ºC. Avoid direct sunlight.

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