

TECHNICAL DATA SHEET

REAFREE® 5080

Powder Resins / Saturated Carboxylated Polyester / TGIC and β -Hydroxyalkylamide



Low / Ultra Low Temperature Cure



Superdurable

PRODUCT APPLICATION DETAILS

Saturated carboxylated polyester for combination with β -Hydroxyalkylamide or TGIC type hardeners. Suitable for the formulation of outdoor SUPERDURABLE and protective thermosetting powders for electrostatic application. For low gloss mat paints by dry-blend with REAFREE 5401 or REAFREE 5406. High cross-linking density. TMA free type. Suitable for fast and low temperature.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Acid value	58-63 mg KOH/g	ASTM D-1639
Viscosity (Cone and plate - 165°C)	14-22 Pa.s	DIN 53229
Color (50%)	2 max Gardner	ASTM D-1544

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Appearance	Pale granules	
Glass transition temperature (Tg)	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

HAA Cure : 10 minutes at 180°C (object temperature) or 15-20 minutes at 160°C (object temperature)

TGIC Cure: 15 minutes at 200°C (object temperature)

RECOMMENDED MIXING RATIO

REAFREE® 5080 / PRIMID XL-552[®]: 92/8
(REAFREE 5080 / TGIC: 88/12)

MARKET & APPLICATIONS

Coatings & Inks

- Industrial Coating
 - Metal Exterior - Powder

PERFORMANCE BENEFITS

- Good flow.
- Good mechanical properties.
- Excellent outdoor durability.
- Enhanced resistance against blanching
- Fast cure, low temperature cure.

REAFREE® 5080

FORMULATION GUIDELINES

	STARTING FORMULATION	
	A	B
REAFREE® 5080	615	-
REAFREE® 5401	-	648
Titanium Dioxide ⁽¹⁾	320	320
β-Hydroxyalkylamide ⁽²⁾	53	20
Flow modifier ⁽³⁾	10	10
Benzoin	2	2

⁽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 temperature	105 °C
Extrusion speed	200 rpm
Application voltage	60-80 kV
Test substrate (Degreased steel)	1 mm

COATING PROPERTIES

	CHARACTERISTICS	METHODS
Film thickness	60-80 microns	
Gloss (60°)	approx 23 %	ASTM D-523-60E
Direct impact	Over 50 kg.cm	ASTM D-2794
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.

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.

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REAFREE® 5080

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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