

# REAFREE® 8580-T

POWDER COATINGS / PRIMID

TECHNICAL DATA SHEET

## Product Application details

Saturated carboxylated polyester for combination with  $\beta$ -Hydroxyalkylamide type hardeners. Suitable for the formulation of outdoor durable and protective thermosetting tribochargeable powders for electrostatic application. General purpose polyester. For high gloss systems. Gas oven stabilized. TMA free type. Tribo enhanced version of 8580.

## Performance Benefits

- Good flow and degassing properties.
- High gloss.
- Good mechanical properties.
- Excellent outdoor durability
- Good yellowing resistance curing with direct-fired gas ovens.
- Excellent chargeability with tribo guns.

## Polymer Type

- Saturated Carboxylated Polyester Resin

## Sales Specifications

Colour (50%), (ASTM D-1544)	2 max
Acid value, mg KOH/g (ASTM D-1639)	30 - 36
Viscosity 165°C, Pa.s (ICI – DIN 53229)	15 - 25

## Other Characteristics<sup>1</sup>

Appearance	Pale granules
Glass Transition T, °C (DSC - Tg)	approx 61

<sup>1</sup> The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications

## Curing Conditions

15 minutes at 160°C (object temperature)

## Recommended Mixing Ratio

REAFREE 8580-T / PRIMID XL-552<sup>(1)</sup> : 95/5  
REAFREE 8580-T / PRIMID QM-1260<sup>(1)</sup>: 94,5/5,5

<sup>(1)</sup>PRIMID is a trade mark of EMS-Chemie AG

## Starting Formulation

<b>REAFREE 8580-T</b>	564
Titanium Dioxide <sup>(1)</sup>	310
$\beta$ -Hydroxyalkylamide <sup>(2)</sup>	29
REAFREE F3300-R10	75
Benzoin	2
CRAYVALLAC PC	10
CRAYVALLAC WN-1265	10

## Formulation Guidelines

- <sup>(1)</sup> Kronos 2160  
<sup>(2)</sup> Primid XL-552 (EMS Chemie)

## Application / Extrusion Conditions

Extruder:	BUSS PCS-30
Torque:	40%
Speed:	200 rpm
Extrusion temperature:	105°C
Spraying Gun:	GEMA PG 1-B
Application voltage:	60-80 Kv
Test substrate:	Degreased aluminium 0.8mm

## Coating Properties

Film thickness	60-80 microns
Gloss 60°, (ASTM D-523-60E)	Over 90%
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

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**Product Safety**

Please refer to the corresponding Safety Data Sheet.

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**Delivery form**

Granules. White opaque polyethylene bags of 25 Kg. One Ton pallet shrink – wrapped.

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**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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