

TECHNICAL DATA SHEET

REAFREE® 8582-T

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 tribochargeable thermosetting powders for electrostatic application. For high gloss systems with improved flow, degassing properties and exterior durability.
Gas oven stabilised.

SALES SPECIFICATIONS

| | CHARACTERISTICS | METHODS |
|------------------------------------|-----------------|-------------|
| Acid value | 29-34 mg KOH/g | ASTM D-1639 |
| Viscosity (Cone and plate - 165°C) | 20-40 Pa.s | DIN 53229 |
| Color (50%) | 2 max Gardner | ASTM D-1544 |

OTHER CHARACTERISTICS¹

| | CHARACTERISTICS | METHODS |
|------------------------------|-----------------|---------|
| Appearance | Pale granules | |
| Glass transition temperature | apprx 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

12 minutes at 180°C (object temperature)

RECOMMENDED MIXING RATIO

REAFREE® 8582-T / PRIMID XL-552⁽¹⁾ : 95/5
REAFREE® 8582-T / PRIMID QM-1260⁽¹⁾: 94,5/5,5
⁽¹⁾PRIMID is a trade mark of EMS-Chemie AG

MARKET & APPLICATIONS

Coatings & Inks

- Industrial Coating
 - Metal Exterior - Powder

PERFORMANCE BENEFITS

- Excellent flow and degassing properties.
- High gloss.
- Good mechanical properties.
- Improved outdoor durability versus standard 95/5 resins.
- Enhanced resistance against blanching.
- Excellent anti-sagging properties.
- Good yellowing resistance curing with direct-fired gas ovens.
- Tribochargeable.
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REAFREE® 8582-T

FORMULATION GUIDELINES

| STARTING FORMULATION | |
|------------------------------------|-----|
| REAFREE® 8582-T | 564 |
| Titanium Dioxide ⁽¹⁾ | 310 |
| β-Hydroxyalkylamide ⁽²⁾ | 29 |
| REAFREE® F3300-R10 | 75 |
| Benzoin | 2 |
| CRAYVALLAC® PC | 10 |
| CRAYVALLAC® WN-1265 | 10 |

⁽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 aluminium) | 0.8 mm |
| Extrusion temperature | 105 °C |

COATING PROPERTIES

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