

TECHNICAL DATA SHEET

REAFREE® 8501-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 good flow and degassing properties. Gas oven stabilised. TMA free type.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Acid value	32-37 mg KOH/g	ASTM D-1639
Color (50%)	2 max	ASTM D-1544
Viscosity (Cone and plate - 165°C)	16-32 Pa.s	DIN 53229

CURING CONDITIONS

10 minutes at 190°C (object temperature)
15 minutes at 180°C (object temperature)

RECOMMENDED MIXING RATIO

REAFREE ND-2445-T / PRIMID XL-552⁽¹⁾ : 95/5
REAFREE ND-2445-T / PRIMID QM-1260⁽¹⁾: 94,5/5,5
⁽¹⁾ EMS-Chemie AG

MARKET

Coatings & Inks

- Industrial Coating
 - General Industry
 - Metal Exterior - Powder

PERFORMANCE BENEFITS

- Excellent flow and degassing properties.
- High gloss.
- Good mechanical properties.
- Excellent outdoor durability.
- Good yellowing resistance.
- Tribochargeable.

REAFREE® 8501-T

FORMULATION GUIDELINES

STARTING FORMULATION	
REAFREE® ND-2445-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

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.

Arkema Coating Resins 410 Gregson Dr. Cary, NC 27511 – USA T +1 919 469 6700	Arkema Química, S.A.U. Ctra. Olzinelles, s/n E-08470 Sant Celoni (BCN) Spain T +34 938 674 000	Arkema Chemical India Private Ltd. D-43, Trans Thane Creek MIDC Industrial Area 400706 Mumbai – India T +91 22 67377122	Headquarters: Arkema France 420, rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80
---	--	---	--

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.
Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790