

TECHNICAL DATA SHEET

REAFREE® 17014

Powder Resins / Saturated Hydroxylated Polyester / Polyisocyanate

PRODUCT APPLICATION DETAILS

Saturated Hydroxylated polyester for combination with blocked isocyanate resin and polyurethodione. Suitable for the formulation of heat transfer matt paints in combination with REAFREE 17091.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Acid value	2 max 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
Hydroxyl value	38-48 mg KOH/g	G/07-1

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Appearance		
Glass transition temperature (T _g)	approx 60 °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 200°C (object temperature)

RECOMMENDED MIXING RATIO

REAFREE 17014/ Uretodione: 80/20

MARKET

Coatings & Inks

- Industrial Coating
 - General Industry
 - Metal Exterior - Powder
 - Metal Interior - Powder

PERFORMANCE BENEFITS

- Excellent flow
- Excellent mechanical properties
- Excellent outdoor durability
- Low gloss in a "one-shot" process.

REAFREE® 17014

FORMULATION GUIDELINES

STARTING FORMULATION	
REAFREE® 17014	510
REAFREE® 17091	150
Vestagon BF 1320 ⁽¹⁾	300
Flow modifier ⁽²⁾	12
Benzoin	3,5
Carbon Black ⁽³⁾	0,04
Red Bayferrox 130M ⁽⁴⁾	0,01
Colortherm Yellow 10 ⁽⁴⁾	3,65
Titanium Dioxide ⁽⁵⁾	20,8

⁽¹⁾ Evonik ⁽²⁾ BYK® 360P (Byk Chemie) ⁽³⁾ Printex V ⁽⁴⁾ Lanxess ⁽⁵⁾ Kronos® 2160

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
Extrusion temperature	80 °C
Test substrate (Degreased Aluminium)	0.8 mm

COATING PROPERTIES

	CHARACTERISTICS	METHODS
Film thickness	60-80 microns	
Gloss (60°)	approx.15 %	
Cupping test	Over 5 mm	DIN 53156
Direct impact	Over 50 kg.cm	ASTM D-2794
Reverse impact	Over 50 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
51, Esplanade du Général de Gaulle
92800 Puteaux – 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

arkema.com

ARKEMA