

TECHNICAL DATA SHEET

REAFREE® 17009

Powder Resins / Saturated Hydroxylated Polyester / Polyisocyanate

PRODUCT APPLICATION DETAILS

Saturated Hydroxylated polyester for combination with blocked isocyanate resin, polyurethodiones and aminoplast hardeners. Suitable for the formulation of decorative and protective thermosetting powders for electrostatic application. Low isocyanate demand. TMA free type.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Acid value	7 max mg KOH/g	ASTM D-1639
Viscosity (Cone and plate - 165°C)	20-50 Pa.s	DIN 53229
Color (50%)	3 max Gardner	ASTM D-1544
Hydroxyl value	25-33 mg KOH/g	G/07-1

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Appearance	Pale granules	
Glass transition temperature (Tg)	approx 55 °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

15-20 minutes at 200°C (object temperature)

RECOMMENDED MIXING RATIO

REAFREE 17009 / Blocked isocyanate: From 85/15 to 88/12, according to NCO value of the isocyanate

MARKET

Coatings & Inks

- Industrial Coating
 - General Industry
 - Metal Exterior - Powder

PERFORMANCE BENEFITS

- Excellent flow
- Excellent mechanical properties
- Excellent outdoor durability
- Wrinkle finishes combined with {Tetrakis (methoxymethyl) glycoluril} systems

REAFREE® 17009

FORMULATION GUIDELINES

STARTING FORMULATION	
Black Wrinkle	
REAFREE® 17009	659
Chemark 1374 ⁽¹⁾	42
Actiron 32-18 A ⁽²⁾	10
Flow modifier ⁽³⁾	10,5
Benzoin	6,5
Carbon Black ⁽⁴⁾	10
Blanc fixe ABR ⁽⁵⁾	262

⁽¹⁾ Worlée ⁽²⁾ Synthron ⁽³⁾ BYK 360-P (Byk Chemie) ⁽⁴⁾ PRINTEX L ⁽⁵⁾ ICS

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 steel)	1 mm
Extrusion temperature	90 °C

COATING PROPERTIES

	CHARACTERISTICS	METHODS
Film thickness	80-100 microns	
Gloss (60°)	approx. 5 %	
Cupping test	Over 7 mm	DIN 53156
Direct impact	Over 75 kg.cm	ASTM D-2794
Reverse impact	Over 75 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

arkema.com

ARKEMA