

TECHNICAL DATA SHEET

REAFREE® 4763-S

Powder Resins / Saturated Carboxylated Polyester / TGIC

PRODUCT APPLICATION DETAILS

Saturated carboxylated polyester for combination with Triglycidylisocyanurate. Suitable for the formulation of outdoor durable and protective thermosetting powders for electrostatic application. Possibility to cure 1 minute / 290°C. High reactivity with good flexibility. Gas oven stabilized. TMA free type.

SALES SPECIFICATIONS

	CHARACTERISTICS	METHODS
Acid value	30-36 mg KOH/g	ASTM D-1639
Viscosity (Cone and plate - 165°C)	15-25 Pa.s	DIN 53229
Color (50%)	2 max Gardner	ASTM D-1544

OTHER CHARACTERISTICS¹

	CHARACTERISTICS	METHODS
Appearance	Pale granules	
Glass transition temperature (Tg)	approx 61 °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 minutes at 160°C (object temperature)
1 minute at 290°C (object temperature)

RECOMMENDED MIXING RATIO

REAFREE® 4763-S / TGIC: 93/7

MARKET & APPLICATIONS

Coatings & Inks

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

PERFORMANCE BENEFITS

- Excellent flexibility. Coil-coatings, PCM applications.
- Very good flow for high reactive type.
- High gloss.
- Good mechanical properties.
- Excellent outdoor durability.
- Reduced blooming at low temperature curing.

REAFREE® 4763-S

FORMULATION GUIDELINES

STARTING FORMULATION	
REAFREE® 4763-S	595
Titanium Dioxide ⁽¹⁾	320
Triglycidylisocyanurate ⁽²⁾	45
REAFREE® F3300-A15	37
Benzoin	3

⁽¹⁾ Kronos® 2160

⁽²⁾ Araldite® PT-810 (Huntsman) / Tepic (Nissan Chemical)

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	80 °C

COATING PROPERTIES

	CHARACTERISTICS	METHODS
Film thickness	60-80 microns	
Gloss (60°)	Over 90 %	
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
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