

Chesterton ARC S7 High Temperature & Chemical Resistant Novolac Vinyl Ester Coating

Category : Polymer , Thermoset , Epoxy , Vinyl Ester

Material Notes:

Description: ARC S7 is a low VOC, epoxy novolac vinyl ester based coating intended for high temperature exposures in chemically aggressive applications where the risk for thermal cycling may be present. It is highly resistant to a wide range of inorganic as well as organic acids and hydrocarbon based chemical compounds. The product utilizes a unique reinforcement design allowing it to be highly resistant to thermal cycling exposures up to 180°C (355°F) while maintaining its adhesion and resisting cracking, delamination and permeation. ARC S7 is able to be spray applied via conventional airless spray systems at a wet film thickness of 0.25-0.5 mm (10-20 mils) per coat. ARC S7 may also be applied by brush and roller, though with reduced film build. It is recommended to be applied in two coats for elimination of holidays and pinholes.

Benefits: Resistant to thermal cycling
Resistant to cold wall induced blistering
ARC S7 is well suited for aggressive chemical exposures at elevated exposures and is easily sprayed with conventional spray equipment
ARC S7 does not require a primer and is capable of in-situ curing

Suggested Uses: Flue gas ducts
Quench zones
Process tanks
Storage tanks
Steel structures
Bag filters
Reactor domes

Information provided by Chesterton

Order this product through the following link:

http://www.lookpolymers.com/polymer_Chesterton-ARC-S7-High-Temperature-Chemical-Resistant-Novolac-Vinyl-Ester-Coating.php

Physical Properties	Metric	English	Comments
Density	2.10 g/cc	0.0759 lb/in ³	Cured
Volatile Organic Compounds (VOC) Content	550 g/l @Temperature 43.0 °C	550 g/l @Temperature 109 °F	EPA 24

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	89	89	ASTM D2240
Elongation at Break	1.04 %	1.04 %	ASTM D638
Flexural Strength	51.7 MPa	7500 psi	ASTM D790
Flexural Modulus	6.23 GPa	903 ksi	ASTM D790
Compressive Strength	110 MPa	16000 psi	ASTM D695
Adhesive Bond Strength	>= 16.3 MPa	>= 2370 psi	ASTM D4541
Impact Test	9.04 J	6.67 ft-lb	direct; ASTM D2794

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	135 °C	275 °F	Wet Service (water)
	180 °C	356 °F	Dry Service (continuous)

Processing Properties	Metric	English	Comments
Cure Time	60.0 min	1.00 hour	Overcoat Begin
	@Temperature 29.0 °C	@Temperature 84.2 °F	
	70.02 min	1.167 hour	Tack Free without MEK
	@Temperature 29.0 °C	@Temperature 84.2 °F	
	76.02 min	1.267 hour	Tack Free with MEK
	@Temperature 29.0 °C	@Temperature 84.2 °F	
	100 min	1.67 hour	Tack Free without MEK
	@Temperature 21.0 °C	@Temperature 69.8 °F	
	120 min	2.00 hour	Tack Free without MEK
	@Temperature 16.0 °C	@Temperature 60.8 °F	
	120 min	2.00 hour	Tack Free with MEK
	@Temperature 21.0 °C	@Temperature 69.8 °F	
	120 min	2.00 hour	Overcoat Begin
	@Temperature 21.0 °C	@Temperature 69.8 °F	
	140 min	2.33 hour	Tack Free without MEK
	@Temperature 10.0 °C	@Temperature 50.0 °F	
	180 min	3.00 hour	Tack Free with MEK
	@Temperature 10.0 °C	@Temperature 50.0 °F	
	180 min	3.00 hour	Overcoat End
	@Temperature 29.0 °C	@Temperature 84.2 °F	
	240 min	4.00 hour	Overcoat End
	@Temperature 21.0 °C	@Temperature 69.8 °F	
	270 min	4.50 hour	Overcoat End
	@Temperature 16.0 °C	@Temperature 60.8 °F	
	300 min	5.00 hour	Overcoat End
	@Temperature 10.0 °C	@Temperature 50.0 °F	
	360 min	6.00 hour	Overcoat Begin
	@Temperature 16.0 °C	@Temperature 60.8 °F	
	720 min	12.0 hour	Overcoat Begin
	@Temperature 10.0 °C	@Temperature 50.0 °F	

Processing Properties	Metric _{cn}	English _{ur}	Comments
	@Temperature 29.0 °C	@Temperature 84.2 °F	Full Chemical
	1440 min	24.0 hour	Full Chemical
	@Temperature 21.0 °C	@Temperature 69.8 °F	
	1500 min	25.0 hour	Tack Free with MEK
	@Temperature 16.0 °C	@Temperature 60.8 °F	
	2880 min	48.0 hour	Full Chemical
	@Temperature 16.0 °C	@Temperature 60.8 °F	
	4320 min	72.0 hour	Full Chemical
	@Temperature 10.0 °C	@Temperature 50.0 °F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China