Hexcel® Redux® 840 One-part Foaming Epoxy Paste Adhesive

Category : Polymer , Adhesive , Thermoset , Epoxy , Epoxy Adhesive

Material Notes:

Redux® 840 is a black one-part, foaming, epoxy paste adhesive that is thixotropic.Features: Provides a shear-carrying connection across any discontinuities in bonded sandwich panels; Maximum service temperature of 80°C/176°F; Can cure at temperatures from 120°C to 175°C/248°F to 347°F; Suitable for application by spatula or extrusion; Very low volatile content.Applications: Bonding segments of honeycomb core; Bonding edges of honeycomb core to structural edge members in bonded sandwich panels; Panel section bonding.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Hexcel-Redux-840-One-part-Foaming-Epoxy-Paste-Adhesive.php

Physical Properties	Metric	English	Comments
Density	0.530 g/cc @Temperature 22.0 °C	0.0191 lb/in³ @Temperature 71.6 °F	Foamed/Cured Density; Cure Cycle: 20 min @ 175°C/347°F
	0.550 g/cc @Temperature 22.0 °C	0.0199 lb/in³ @Temperature 71.6 °F	Foamed/Cured Density; Cure Cycle: 30 min @ 150°C/302°F
	0.760 g/cc @Temperature 22.0 °C	0.0275 lb/in³ @Temperature 71.6 °F	Foamed/Cured Density; Cure Cycle: 60 min @ 120°C/248°F
	1.08 g/cc @Temperature 22.0 °C	0.0390 lb/in³ @Temperature 71.6 °F	EN542

Mechanical Properties	Metric	English	Comments
Compressive Yield Strength	11.0 MPa @Temperature 22.0 °C	1600 psi @Temperature 71.6 °F	Block Compression; Cure Cycle: 20 min @ 175°C/347°F; ASTM D695
	12.0 MPa @Temperature 22.0 °C	1740 psi @Temperature 71.6 °F	Block Compression; Cure Cycle: 30 min @ 150°C/302°F; ASTM D695
	31.0 MPa @Temperature 22.0 °C	4500 psi @Temperature 71.6 °F	Block Compression; Cure Cycle: 60 min @ 120°C/248°F; ASTM D695
Shear Strength	6.20 MPa @Temperature 22.0 °C	899 psi @Temperature 71.6 °F	Short Beam Shear; Dry; 60 min @ 120°C; DMS2180
	6.30 MPa @Temperature 22.0 °C	914 psi @Temperature 71.6 °F	Short Beam Shear; Dry; 30 min @ 150°C; DMS2180
	6.30 MPa @Temperature 22.0 °C	914 psi @Temperature 71.6 °F	Short Beam Shear; Dry; 20 min @ 175°C; DMS2180

Mechanical Properties	Metric	English	Comments
	6.70 MPa @Temperature 22.0 °C	972 psi @Temperature 71.6 °F	Double Lap Shear - 1000 hours @ 80°C/176°F, 100% RH; 30 min @ 150°C; Hexcel IS202
	7.62 MPa @Temperature 80.0 °C	1110 psi @Temperature 176 °F	Tube Shear; Dry; 20 min @ 175°C; EN2667-2
	9.05 MPa @Temperature 80.0 °C	1310 psi @Temperature 176 °F	Tube Shear; Dry; 30 min @ 150°C; EN2667-2
	9.87 MPa @Temperature 22.0 °C	1430 psi @Temperature 71.6 °F	Double Lap Shear - 1000 hours @ 80°C/176°F, 100% RH; 20 min @ 175°C; Hexcel IS202
	9.93 MPa @Temperature 22.0 °C	1440 psi @Temperature 71.6 °F	Double Lap Shear - 1000 hours @ 80°C/176°F, 100% RH; 60 min @ 120°C; Hexcel IS202
	11.0 MPa @Temperature 80.0 °C	1600 psi @Temperature 176 °F	Double Lap Shear; Dry; 60 min @ 120°C; Hexcel IS202
	11.1 MPa @Temperature 80.0 °C	1610 psi @Temperature 176 °F	Double Lap Shear; Dry; 20 min @ 175°C; Hexcel IS202
	11.1 MPa @Temperature 80.0 °C	1610 psi @Temperature 176 °F	Tube Shear; Dry; 60 min @ 120°C; EN2667-2
	11.4 MPa @Temperature 80.0 °C	1650 psi @Temperature 176 °F	Double Lap Shear; Dry; 30 min @ 150°C; Hexcel IS202
	12.3 MPa @Temperature 22.0 °C	1780 psi @Temperature 71.6 °F	Tube Shear; Dry; 20 min @ 175°C; EN2667-2
	13.2 MPa @Temperature 22.0 °C	1910 psi @Temperature 71.6 °F	Tube Shear; Dry; 60 min @ 120°C; EN2667-2
	13.3 MPa @Temperature 22.0 °C	1930 psi @Temperature 71.6 °F	Double Lap Shear; Dry; 60 min @ 120°C; Hexcel IS202
	13.6 MPa @Temperature 22.0 °C	1970 psi @Temperature 71.6 °F	Double Lap Shear; Dry; 20 min @ 175°C; Hexcel IS202
	15.1 MPa @Temperature -55.0 °C	2190 psi @Temperature -67.0 °F	Tube Shear; Dry; 20 min @ 175°C; EN2667-2
	15.5 MPa @Temperature 22.0 °C	2250 psi @Temperature 71.6 °F	Tube Shear; Dry; 30 min @ 150°C; EN2667-2
	15.5 MPa	2250 psi	Double Lap Shear; Dry; 30 min @

Mechanical Properties	Metric	English	Comments
	@Temperature 22.0 °C	@Temperature 71.6 °F	150°C; Hexcel IS202
	18.5 MPa @Temperature -55.0 °C	2680 psi @Temperature -67.0 °F	Tube Shear; Dry; 30 min @ 150°C; EN2667-2
	18.9 MPa @Temperature -55.0 °C	2740 psi @Temperature -67.0 °F	Tube Shear; Dry; 60 min @ 120°C; EN2667-2

Thermal Properties	Metric	English	Comments
Glass Transition Temp, Tg	113 °C	235 °F	E' onset; Cure Cycle: 60 min @ 120°C/248°F; EN 6064
	114 °C	237 °F	E' onset; Cure Cycle: 30 min @ 150°C/302°F; EN 6064
	114 °C	237 °F	E' onset; Cure Cycle: 20 min @ 175°C/347°F; EN 6064

Processing Properties	Metric	English	Comments
Cure Time	20.0 min @Temperature 175 °C	0.333 hour @Temperature 347 °F	
	30.0 min @Temperature 150 °C	0.500 hour @Temperature 302 °F	
	60.0 min @Temperature 120 °C	1.00 hour @Temperature 248 °F	

Descriptive Properties	Value	Comments
Color	Black	
Slump Properties (mm)	3	25°C; BMS5-28
	50	52°C; BMS5-28

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