

3M Scotch-Weld™ DP460 NS Epoxy Adhesive

Category : Polymer , Thermoset , Epoxy , Epoxy Adhesive

Material Notes:

3M™ Scotch-Weld™ Epoxy Adhesive DP460 Off-White and DP460 NS are high performance, two-part epoxy adhesives offering outstanding shear and peel adhesion and very high levels of durability. Information provided by 3M

Order this product through the following link:

http://www.lookpolymers.com/polymer_3M-Scotch-Weld-DP460-NS-Epoxy-Adhesive.php

Physical Properties	Metric	English	Comments
Viscosity	8000 - 14000 cP	8000 - 14000 cP	Accelerator
	150000 - 275000 cP	150000 - 275000 cP	Base

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	78 - 84	78 - 84	
Shear Strength	0.621 MPa	90.0 psi	Overlap, Isopropyl Alcohol Wipe surface prep, Neoprene/Steel
	0.786 MPa	114 psi	Overlap, Isopropyl Alcohol/Abrade/Isopropyl Alcohol surface prep, Neoprene/Steel
	0.896 MPa	130 psi	Overlap, Isopropyl Alcohol Wipe surface prep, SBR/Steel
	1.45 MPa	210 psi	Overlap, Isopropyl Alcohol Wipe surface prep, Polyacrylic
	1.65 MPa	239 psi	Overlap, Isopropyl Alcohol/Abrade/Isopropyl Alcohol surface prep, SBR/Steel
	1.86 MPa	270 psi	Overlap, Isopropyl Alcohol/Abrade/Isopropyl Alcohol surface prep, Polyacrylic
	2.16 MPa	313 psi	Overlap, Isopropyl Alcohol/Abrade/Isopropyl Alcohol surface prep, PVC
	2.21 MPa	320 psi	Overlap, Isopropyl Alcohol Wipe surface prep, Polystyrene
	2.38 MPa	345 psi	Overlap, Isopropyl Alcohol Wipe surface prep, ABS
	2.62 MPa	380 psi	Overlap, Isopropyl Alcohol Wipe surface prep, Polycarbonate
2.69 MPa	390 psi	Overlap, Isopropyl Alcohol/Abrade/Isopropyl Alcohol surface prep, Polycarbonate	

Mechanical Properties	Metric	English	Comments
			Overlap, Isopropyl Alcohol/Abrade/Isopropyl Alcohol surface prep, Polystyrene
	3.93 MPa	570 psi	Overlap, Isopropyl Alcohol Wipe surface prep, FRP
	3.94 MPa	572 psi	Overlap, Isopropyl Alcohol/Abrade/Isopropyl Alcohol surface prep, ABS
	5.62 MPa	815 psi	Overlap, Isopropyl Alcohol Wipe surface prep, PVC
	8.34 MPa	1210 psi	Overlap, Isopropyl Alcohol Wipe surface prep, Phenolic
	8.487 MPa	1231 psi	Overlap, Isopropyl Alcohol/Abrade/Isopropyl Alcohol surface prep, Phenolic
	9.508 MPa	1379 psi	Overlap, Isopropyl Alcohol/Abrade/Isopropyl Alcohol Wipe surface prep, FRP
	15.9 MPa	2300 psi	Overlap, Aluminum Oakite degrease
	16.5 MPa	2400 psi	Overlap, Stainless Steel MEK/abrade/MEK
	17.1 MPa	2480 psi	Overlap, Galvanized Steel Okite degrease Hot dip
	18.4 MPa	2670 psi	Overlap, Aluminum MEK/abrade/MEK
	20.7 MPa	3000 psi	Overlap, Galvanized Steel Okite degrease Electrodeposited
	23.4 MPa	3400 psi	Overlap, Brass MEK/abrade/MEK
	24.8 MPa	3600 psi	Overlap, CRS MEK/abrade/MEK
	30.3 MPa	4400 psi	Overlap, Copper MEK/abrade/MEK
	31.0 MPa	4500 psi	Overlap, Aluminum Etched
	32.1 MPa	4650 psi	Aluminum, Overlap
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	33.8 MPa	4900 psi	Aluminum, Overlap
	@Temperature -55.0 °C	@Temperature -67.0 °F	
	2.90 MPa	420 psi	Aluminum, Overlap
	@Temperature 121 °C, Time 900 sec	@Temperature 250 °F, Time 0.250 hour	
	9.38 MPa	1360 psi	Aluminum, Overlap
	@Temperature 82.0 °C,	@Temperature 180 °F,	

Mechanical Properties	Time 900 sec Metric	Time 0.250 hour English	Comments
	8.414 MPa	88.8 psi	Aluminum, Overlap
	@Time 3600 sec	@Time 1.00 hour	
	12.5 MPa	1810 psi	Aluminum, Overlap
	@Time 1800 sec	@Time 0.500 hour	
	18.5 MPa	2680 psi	Aluminum, Overlap
	@Time 14400 sec	@Time 4.00 hour	
Peel Strength	0.526 - 0.877 kN/m	3.00 - 5.00 pli	Aluminum, T-Peel
	@Temperature -55.0 °C	@Temperature -67.0 °F	
	3.33 kN/m	19.0 pli	Aluminum Bell Peel; ASTM D3167
	@Temperature -55.0 °C	@Temperature -67.0 °F	
	3.51 kN/m	20.0 pli	Aluminum, T-Peel
	@Temperature 82.0 °C	@Temperature 180 °F	
	6.84 kN/m	39.0 pli	Aluminum Bell Peel; ASTM D3167
	@Temperature 82.0 °C	@Temperature 180 °F	
	10.5 kN/m	60.0 pli	Aluminum, T-Peel
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	13.5 kN/m	77.0 pli	Aluminum Bell Peel; ASTM D3167
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear	74.44 µm/m-°C	41.36 µin/in-°F	Below Tg
	166 µm/m-°C	92.2 µin/in-°F	Above Tg
Thermal Conductivity	0.180 W/m-K	1.25 BTU-in/hr-ft ² -°F	
	@Temperature 45.0 °C	@Temperature 113 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	3.25e+15 ohm-cm	3.25e+15 ohm-cm	ASTM D257
Dielectric Strength	28.6 kV/mm	727 kV/in	ASTM D149

Descriptive Properties	Value	Comments
Appearance	Amber	Accelerator

Descriptive Properties	Off-White Value	Comments
	White	Base

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