

## 3M Scotch-Weld™ 2214 Non-Metallic Filled Epoxy Adhesive

Category: Polymer, Thermoset, Epoxy, Epoxy Adhesive

## **Material Notes:**

3M™ Scotch-Weld™ Non-Metallic Filled is a non-metal filled version of Scotch-Weld adhesive 2214 regular. One part 250°F (121°C) curing 100% solids, 3M™ Scotch-Weld™ Epoxy Adhesive 2214 is a paste consistency epoxy adhesive designed for bonding metals and many high temperature plastics such as fiberglass reinforced plastic, polyester, and phenolicsInformation provided by 3M

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_3M-Scotch-Weld-2214-Non-Metallic-Filled-Epoxy-Adhesive.php

Physical Properties	Metric	English	Comments
Viscosity	50 - 200 cP	50 - 200 cP	

Hardness, Shore D         >= 85         >= 85           Tensile Strength, Ultimate         62.1 MPa         9000 psi           Elongation at Break         <= 2.0 %         <= 2.0 %           Modulus of Elasticity         4.83 GPa         700 ksi           Shear Strength         2.07 MPa         300 psi         Aluminum Overlap           By Care Strength         2.76 MPa         400 psi         Aluminum Overlap           By Care Strength         4.14 MPa         600 psi         Aluminum Overlap           By Care Strength         4.14 MPa         600 psi         Aluminum Overlap           By Care Strength         10.3 MPa         1500 psi         Aluminum Overlap           By Care Strength         27.6 MPa         4000 psi         Aluminum Overlap           By Care Strength         27.6 MPa         4000 psi         Aluminum Overlap           By Care Strength         27.6 MPa         4000 psi         Aluminum Overlap           By Care Strength         27.6 MPa         4500 psi         Aluminum Overlap           By Care Strength         27.6 MPa         4500 psi         Aluminum Overlap	Mechanical Properties	Metric	English	Comments
Elongation at Break  <= 2.0 % <p>Modulus of Elasticity 4.83 GPa 700 ksi  2.07 MPa 300 psi Aluminum Overlap  Premperature -53.0 °C  @Temperature -63.4 °F  2.76 MPa 400 psi QTemperature 351 °F  4.14 MPa 600 psi QTemperature 350 °F  4.14 MPa @Temperature 149 °C @Temperature 300 °F  10.3 MPa 1500 psi QTemperature 250 °F  27.6 MPa 4000 psi Aluminum Overlap  Aluminum Overlap</p>	Hardness, Shore D	>= 85	>= 85	
Modulus of Elasticity  4.83 GPa  700 ksi  2.07 MPa 300 psi @Temperature -53.0 °C @Temperature -63.4 °F  2.76 MPa 400 psi @Temperature 177 °C @Temperature 351 °F  4.14 MPa 600 psi @Temperature 149 °C @Temperature 300 °F  10.3 MPa 1500 psi @Temperature 250 °F  27.6 MPa 4000 psi @Temperature 250 °F  27.6 MPa 4000 psi Aluminum Overlap @Temperature 24.0 °C @Temperature 75.2 °F  31.0 MPa 4500 psi Aluminum Overlap	Tensile Strength, Ultimate	62.1 MPa	9000 psi	
Shear Strength  2.07 MPa 300 psi @Temperature -53.0 °C @Temperature -63.4 °F  2.76 MPa 400 psi @Temperature 177 °C @Temperature 351 °F  4.14 MPa 600 psi @Temperature 149 °C @Temperature 300 °F  10.3 MPa 1500 psi @Temperature 250 °F  27.6 MPa 4000 psi Aluminum Overlap	Elongation at Break	<= 2.0 %	<= 2.0 %	
Shear Strength  @Temperature -53.0 °C @Temperature -63.4 °F  2.76 MPa	Modulus of Elasticity	4.83 GPa	700 ksi	
@Temperature -53.0 °C @Temperature -63.4 °F  2.76 MPa 400 psi  @Temperature 177 °C @Temperature 351 °F  4.14 MPa 600 psi  @Temperature 149 °C @Temperature 300 °F  10.3 MPa 1500 psi  @Temperature 121 °C @Temperature 250 °F  27.6 MPa 4000 psi  @Temperature 24.0 °C @Temperature 75.2 °F  31.0 MPa 4500 psi  Aluminum Overlap  Aluminum Overlap	Shear Strength	2.07 MPa	300 psi	Aluminum Overlan
@Temperature 177 °C @Temperature 351 °F  4.14 MPa 600 psi	Shear Strength	@Temperature -53.0 °C	@Temperature -63.4 °F	Additional
@Temperature 177 °C @Temperature 351 °F  4.14 MPa 600 psi		2.76 MPa	400 psi	Aluminum Overlan
@Temperature 149 °C @Temperature 300 °F  10.3 MPa 1500 psi		@Temperature 177 °C	@Temperature 351 °F	Aluminum Overlap
@Temperature 149 °C @Temperature 300 °F  10.3 MPa 1500 psi  @Temperature 121 °C @Temperature 250 °F  27.6 MPa 4000 psi  @Temperature 24.0 °C @Temperature 75.2 °F  31.0 MPa 4500 psi  Aluminum Overlap  Aluminum Overlap		4.14 MPa	600 psi	Aluminum Overlan
@Temperature 121 °C @Temperature 250 °F  27.6 MPa 4000 psi  @Temperature 24.0 °C @Temperature 75.2 °F  31.0 MPa 4500 psi  Aluminum Overlap  Aluminum Overlap		@Temperature 149 °C	@Temperature 300 °F	Adminiani Ovenap
@Temperature 121 °C @Temperature 250 °F  27.6 MPa 4000 psi Aluminum Overlap  @Temperature 24.0 °C @Temperature 75.2 °F  31.0 MPa 4500 psi Aluminum Overlap		10.3 MPa	1500 psi	Aluminum Overlan
Aluminum Overlap  @Temperature 24.0 °C @Temperature 75.2 °F  31.0 MPa 4500 psi  Aluminum Overlap		@Temperature 121 °C	@Temperature 250 °F	Adminiani Ovenap
@Temperature 24.0 °C @Temperature 75.2 °F  31.0 MPa  4500 psi  Aluminum Overlap		27.6 MPa	4000 psi	Aluminum Overlap
Aluminum Overlap		@Temperature 24.0 °C	@Temperature 75.2 °F	
·		31.0 MPa	4500 psi	Aluminum Overlap
		@Temperature 82.0 °C	@Temperature 180 °F	

Thermal Properties	Metric	English	Comments
	130 μm/m-°C	72.2 μin/in-°F	
CTE, linear	@Temperature -30.0 -	@Temperature -22.0 -	



Thermal Properties	100 °C Metric	212 °F English	Comments
Thermal Conductivity	0.209 W/m-K	1.45 BTU-in/hr-ft <sup>2</sup> -°F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.50e+13 ohm-cm	2.50e+13 ohm-cm	
Dielectric Strength	22.4 kV/mm	570 kV/in	
	@Thickness 0.991 mm	@Thickness 0.0390 in	
Arc Resistance	26 sec	26 sec	

Descriptive Properties	Value	Comments
Appearance	Cream	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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