

# 3M<sup>™</sup> Scotch-Weld<sup>™</sup> Repair Paste 2110

# **Technical Data Sheet**

# **Product Description**

3M<sup>™</sup> Scotch-Weld<sup>™</sup> Repair Paste 2110 is a two-part urethane paste that cures to an erosion resistant polyurethane elastomer. It is designed to repair polyurethane coatings or films commonly used for erosion protection on aircraft, including helicopter rotor blades, leading edges, engine components and other areas susceptible to erosion damage. It is supplied in 50 ml dual syringe plastic Duo-Pak cartridges with a 1:1 mix ratio as part of the 3M<sup>™</sup> EPX<sup>™</sup> Plus II Applicator System (with 3M<sup>™</sup> 1:1/2:1 Plunger for EPX Plus II 10/CV). 3M<sup>™</sup> Scotch-Weld<sup>™</sup> Repair Paste 2110 is also available as a kit.

# 3M Scotch-Weld Repair Paste 2110:

- 100% solids urethane paste
- 1:1 mix ratio
- Cures to a black, erosion resistant polyurethane elastomer
- Designed to repair polyurethane films and coatings
- Has excellent sand and rain erosion resistance properties
- Convenient 50 ml Duo-Pak cartridges for easy application with minimal waste

# **Typical Physical Properties**

**Note:** 1) The following technical information and data should be considered representative or typical only and should not be used for specification purposes. Metric values are listed in parenthesis. 2) ASTM = American Society for Testing and Materials.

Property	Test Method		Typical Value	
Uncured Properties				
Color	Part A	Visual	Transparent	
	Part B		Black	
Density	Part A	ASTM D1875	1.05 g/ml	
	Part B		1.05 g/ml	
Viscosity	Part A	ASTM D2556	200,000 – 250,000 cps	
	Part B		70,000 – 80,000 cps	

Property	Test Method	Typical Value		
Cured Properties				
Color	Visual	Black		
Density	ASTM D792	1.05 g/ml		
Time to Full Cure @ 77°F (25°C)	ASTM D4440	24 hours		
Hardness (Shore A)	ASTM D2240	70		
Taber Abrasion	ASTM D4060	0.020 g		
Work Life	3M test method C-548	10 minutes		
Tack Free Time	3M test method C-3173	6 hours		
Adhesion to Polyurethane	ASTM D3330, Method A	20 lb/in		
Adhesion to Epoxy Glass Fiber Composite	ASTM D3330, Method A	12 lb/in		
Fluid Resistance				
Water		Little or no apparent effect		
JP4/JP8 Aviation Fluid	24 hour immersion			
De-icing Fluid				
Hydraulic Fluid (MIL-PRF-83282)				
Motor Oil (MIL-PRF-21260E)				
Humidity Resistance	95% RH @ 140°F for 30 days	Little or no apparent effect		

#### **Directions For Use**

# I. Surface Preparation:

For best adhesion, oxide films, oils, dust, mold release agents and all other surface contaminants must be completely removed. Surface abrasion and cleaning with isopropanol\* is recommended when bonding to polyurethane.

# II. Dispensing:

3M<sup>™</sup> Scotch-Weld<sup>™</sup> Repair Paste 2110 is supplied in a dual syringe plastic Duo-Pak cartridge as part of the 3M<sup>™</sup> EPX<sup>™</sup> Applicator System. To use, simply insert the Duo-Pak cartridge into the EPX<sup>™</sup> applicator and start the plunger into the cylinders using light pressure on the trigger. Next, remove the Duo-Pak cartridge cap, attach the static mixer and expel a small amount of adhesive (about the size of a quarter) to be sure both sides of the Duo-Pak cartridge are flowing evenly and freely. Pushing the plunger slowly will minimize air bubbles and ensure good mixing of the paste.

# **III. Hand Mixing:**

Hand mixing is not recommended.

#### IV. Clean-up:

Excess uncured paste can be removed by wiping with solvent\* and should be allowed to cure before disposal. Unmixed paste should be handled and stored per the SDS recommendation. Mixed paste that has cured does not require special waste handling procedures. Dispose of gloves, tape and other items containing cured sealant accordingly gloves and tools that have been in contact with any unmixed paste should be treated and disposed of per the SDS recommendation. Wash hands with soap and water.

**\*Note:** When using solvents, extinguish all ignition sources, including pilot lights. Read and follow the manufacturer's precautions and directions for use.

#### Storage

Store products at 60-80°F (16-27°C) for maximum storage life. Rotate stock on a "first-in first-out" basis.

# Shelf Life

When stored in the original, unopened container at the storage conditions suggested, this product has a shelf life of 12 months from the date of shipping

#### **Precautionary Information**

Refer to product label and Safety Data Sheet (SDS) for health and safety information before using this product. For SDS visit our website <u>https://www.3m.com/3M/en\_US/company-us/SDS-search/</u>.

#### **Additional Information**

In the U.S. call toll free 1-800-235-2376, or fax 1-800-435-3082 or 651-737-2171. For U.S. Military, call 1-866-556-5714. If you are outside of the U.S., please contact your nearest 3M representative.

These products were manufacture under a 3M Quality Management System registered to the AS9100 standard

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