

# **MP54110**

MP54110 is a two part unfilled epoxy adhesive designed for bonding of metals, ceramics and most plastics. This product gives good resistance to water, salt spray, inorganic acids and bases and most organic solvents. This product gives better water and temperature resistance than standard 5 minute epoxy. It was especially formulated to a 1:1 mix ratio for use in either MMD equipment or side by side dual cartridges for easy dispensing. A handling cure is normally achieved at room temperature within 30 - 60 minutes with full cure in 24 hours. An elevated temperature cure schedule can be used to reach final properties quickly.

Technology / Base	Ероху	
Type of Product	Structural Adhesive	
Components	Two Component	
Curing	Room Temperature (secondary thermal cure)	
Appearance / Color	Clear	
Consistency	Liquid	

### **Features and Benefits**

- **Excellent Adhesion Properties** •
- Excellent Bonding to Metals, Ceramics and Most Plastics
- **Excellent Chemical Resistance** •
- Suitable for Cartridge and MMD Dispensing Equipment •
- **Excellent Thermal Performance** •
- 100% Reactive .
- **Room Temperature Cure**
- 1:1 volume mix product for easy meter or static mix of application

Technical Data					
Rheology	Value	Condition/Method			
Viscosity - Part A	12,000 cPs	at 25°C			
Viscosity - Part B	20,000 cPs	at 25°C			
Viscosity - Mixed	15,000 cPs	at 25°C			
Uncured Material Characteristics					
Specific Gravity - Part A	1.17				
Specific Gravity - Part B	1.15				
Specific Gravity - Mix	1.16				
Volume Mix Ratio	1 to 1				
Weight Mix Ratio	1 to 1				
Pot Life	8 to 12 min	at 25°C	20 gram		
Gel Time			20 gram		
Handling Time	30 to 60 min				
Full Cure @ 23°C	24 hours				
Full Cure @ 66°C					
Shelf Life	12 months unopened				
Cured Mechanical Properties					
Hardness	80 Shore D	ASTM D2240			
Tensile Strength					
Elongation at Break					
Overlap Shear Strength					
Aluminum, Acid Etched at 25°C	15.9 MPa (2300 psi)	ASTM D1002, 25°C 50% RH			
Operating Temperature	-40°C to 130°C (-40°F to 265°F)				
Cured Electrical Properties					
Dielectric Constant					
Dielectric Strength					
Volume Resistivity					





### **General Instructions**

Surfaces to be bonded must be clean, dry and free of other contaminants. Bring both components to room temperature prior to mixing. Measure out specified amounts of parts A and B and stir (without introducing bubbles) until homogenous or use a static mixing nozzle. Apply the uniform mixture to both surfaces. Allow to cure while being held in place with light clamping.

**Specifications and Approvals** 

#### Handling and Clean-Up

See SDS for handling and clean-up information.

#### Storage

Product should be stored in a cool dry place out of direct sunlight. The shelf life is from date of manufacture. Shelf life is based on the products being stored properly at temperatures between 12°C and 25°C. Exposure to temperatures above 25°C will reduce the shelf life. This product should not be frozen.

### Use Note

Many epoxy resin systems are prone to crystallization as epoxy resin is a super-cooled fluid. This condition may give the product a gritty or grainy appearance (or hazy in clear products). In extreme cases it may appear solid and cured. Fluctuating temperatures

Safety and Disposal

See SDS for

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