

# **MP5405NS**

MP5405NS is a two part unfilled epoxy adhesive designed for high speed bonding of metals, ceramics, and most plastics. It cures to a tough semi-rigid material, and is a thixotropic paste consistency to prevent running and sagging. It gives good resistance to water, salt spray, inorganic acids and bases, and most organic solvents. 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 20 - 30 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	Translucent/White	
Consistency	Viscous Paste	

## **Features and Benefits**

- Excellent Bonding to Metals, Ceramics and Most Plastics
- Non-Sag Paste
- Excellent Chemical Resistance
- Suitable for Cartridge and Two Component 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	1,500,000 cPs	at 25°C			
Viscosity - Part B	1,500,000 cPs	at 25°C			
Viscosity - Mixed	1,500,000 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	3 to 5 min	at 25°C 2	0 gram		
Gel Time		2	0 gram		
Handling Time	20 to 30 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	48.3 MPa (7000 psi)	ASTM D638			
Elongation at Break	3 to 5 %	ASTM D638			
Overlap Shear Strength					
Aluminum, Acid Etched at 25°C	19.3 MPa (2800 psi)	ASTM D1002, 25°C 50% RH			
Operating Temperature	-40°C to 130°C (-40°F to 265°F)				
Cured Electrical Properties					
Dielectric Constant	4.5 at 25°C, 100Hz	ASTM D150			
Dielectric Strength	16.1 kV/mm	ASTM D149			
Volume Resistivity	8 E 14 ohm⋅cm	ASTM D257			





## **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

Safety and Disposal See SDS for

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