



# PRODUCT INFORMATION

**HIGH TECHNOLOGY MATERIALS**

## METREG RIP 357

### **RAPID-SETTING, HIGH STRENGTH, FIVE MINUTE THIXOTROPIC EPOXY ADHESIVE**

**METREG RIP 357** has the unique ability to bond items that have irregular surfaces or gaps where conventional epoxy adhesives fail to maintain contact during the curing cycle. Irregular parts and assemblies bonded with **METREG RIP 357** do not have seepage of epoxy through gaps or into unwanted places. **METREG RIP 357** combines the high bond strength of epoxy with short setting and curing time to form a highly resilient bond in only 5 minutes.

**METREG RIP 357** meets the strict requirements of the Metregrip series. The mixing ratio is a non-critical one-to-one mixture by volume or weight. **METREG RIP 357** is frequently packaged in convenient, easy to use 50cc dual syringes. These syringes allow the user to mix and apply **METREG RIP 357** at the same time using either a manual or pneumatic hand held dispenser.

#### DIRECTIONS FOR USE

1. Measure out equal amounts of **METREG RIP 357 BASE** and **METREG RIP 357 ACTIVATOR** into a suitable container for mixing.
2. Mix only as much adhesive as you can conveniently use in less than five minutes.
3. Make sure adhesive is thoroughly mixed. Apply to one surface of parts to be bonded. Porous surfaces may require the adhesive to be applied to both surfaces before bonding.
4. Mate parts together for 10-20 minutes

#### TYPICAL PROPERTIES\*

<u>UNCURED COMPONENTS</u>	<u>BASE</u>	<u>ACTIVATOR</u>
Appearance and Physical Form	Thixotropic Paste	Thixotropic Paste
Color	Various Colors	Colorless
Specific Gravity, (25°/25°C)	1.2	1.15
Viscosity @ 25°C, (Brookfield Helipath, thixotropic, cps)	700,000	700,000
Flash Point °C/°F	254/489	149/300

#### Mixed Material

Appearance	Thixotropic Paste
Specific Gravity	1.2
Mix Ratio-By Weight	1:1
By Volume	1:1
Working Time-Min.@25°C	2
Gel Time-Min.@25°C	5
Fixture Time-Min.@25°C	10-20
Full Cure Time-Hours @25°C	12

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FORM 1105 REV. 0

**TYPICAL PROPERTIES\* (CONT'D)**

<u>Cured Material</u>	
Hardness Shore "D"	80
Specific Gravity	1.2
Glass Transition Temperature (T <sub>g</sub> ), °C	38
Expansion Coefficient (CTE), um.m°C	72 (Below T <sub>g</sub> ), 210 (Above T <sub>g</sub> )
Operating Temperature °C	-65 to 145
Operating Temperature °F	-85 to 293
Water Absorption, %	0.6
Dielectric Strength, V/mil.	370
Dielectric Constant, 10 <sup>3</sup> Hz	3.43
Volume Resistivity, ohm-cm	1.8 x 10 <sup>12</sup>
Dissipation Factor, 10 <sup>3</sup> Hz	0.018

Bond Strengths Tensile Lap Shear @25°C

Aluminum- Aluminum	2,600 psi**
Brass-Brass	1,720 psi
Steel-Steel (Cold Rolled)	2,250 psi
Copper-Copper	1,650 psi
Glass-Glass	Glass Fails Before Bond
Rulon - Aluminum	750

**SAFETY, STORAGE AND HANDLING**

Before using any of the materials referred to in this bulletin, consult the applicable Material Safety Data Sheets for appropriate handling procedures and protective equipment.

**AVAILABILITY AND ORDER INFORMATION**

**METREGRIP 357** is available as a two-component kit consisting of separate, equal weight containers of epoxy resin and curing agent. Standard packaging is in half-pint, pint, quart, gallon, and five-gallon containers. The standard color is light blue. Various colors are possible by altering the color of the base.

**METREGRIP 357** can also be packaged in dual syringes. The two components are premeasured, kept separate until needed, and do not need freezing.

**Ordering:** Specify the name, color, number, quantity, container size and packaging form. The order should be placed with the Mereco Order Entry Department at 1-800-556-7164 or by mail to Mereco Division, Mereco Technologies Group Companies, 1505 Main Street, West Warwick, RI 02893-2992. The minimum order size is \$100.00. Evaluation kits are available on request for \$40.00. The \$40.00 fee will be credited against the first order for the product.

**CLEAN-UP**

**METATERGE 1405** is recommended to replace hazardous solvents for general clean-up. **METATERGE 1405**, a unique water soluble resin detergent, dissolves uncured resin systems and renders them water compatible. Soiled equipment, tools or bench areas can then be simply cleaned with a wet sponge or shop rag. Refer to Data Bulletin.

**METASTRIP 701** is an effective non-corrosive solvent for removing cured epoxy resins to salvage valuable electronic components. Refer to Data Bulletin for details.

\*Properties listed are typical and are not intended as specification values. Users are urged to confirm test values in specific application.

\*\*Treated surface