

Master Bond EP21ARHTND Two component epoxy adhesive, sealant, coating and encapsulating system

Category: Polymer, Thermoset, Epoxy, Epoxy Encapsulant, Unreinforced

Material Notes:

Product Description: Master Bond EP21ARHTND is a two component epoxy resin system for high performance bonding, sealing and coating. It has a convenient 100 to 50 mix ratio by weight and is formulated to cure at ambient temperatures or more quickly at elevated temperatures. It has resistance to a wide array of chemicals, particularly to acids (a more detailed list appears below). It is resistant to sulfuric and hydrochloric acids. EP21ARHTND is 100% reactive and contains no solvents or diluents. It has very low linear shrinkage upon cure. Also, it has outstanding physical properties and electrical insulation values. EP21ARHTND can be used as an adhesive, sealant, coating, potting or encapsulating material. EP21ARHTND is especially useful for coating tanks and other vessels that may contain acids. It is serviceable over the wide temperature range of -60°F to +400°F. It adheres well to a wide variety of substrates including metals, glass, ceramics and many rubbers and plastics. EP21ARHTND is a smooth paste and is considered a non-drip type system. Parts A and B are amber. This epoxy compound is widely used in aerospace, electronic, electrical, chemical processing applications and in other applications where chemical resistance to acids is needed and a non-drip viscosity is helpful. Product Advantages: Smooth paste; contains no solvents or diluents Versatile cure schedules; ambient temperature cures or fast elevated temperature cures High bonding strength to both similar and dissimilar substrates Wide temperature service capability from -60°F to +400°F Good electrical insulator. Low viscosity. Ideal for potting and encapsulation Outstanding chemical resistance, particularly to acidsInformation provided by MasterBond®

Order this product through the following link:

http://www.lookpolymers.com/polymer_Master-Bond-EP21ARHTND-Two-component-epoxy-adhesive-sealant-coating-and-encapsulating-system.php

| Mechanical Properties | Metric | English | Comments |
|---------------------------|----------------------|----------------------|--------------------|
| Hardness, Shore D | >= 75 | >= 75 | |
| Tensile Strength at Break | >= 62.1 MPa | >= 9000 psi | |
| | @Temperature 23.9 °C | @Temperature 75.0 °F | |
| Shear Strength | 17.2 MPa | 2500 psi | Al/Al, Tensile lap |

| Thermal Properties | Metric | English | Comments |
|----------------------------------|---------------------|-----------------------|----------|
| CTE, linear | 40.0 - 45.0 μm/m-°C | 22.2 - 25.0 μin/in-°F | |
| Maximum Service Temperature, Air | 204 °C | 400 °F | |
| Minimum Service Temperature, Air | -51.1 °C | -60.0 °F | |

| Electrical Properties | Metric | English | Comments |
|-----------------------|---------------------|---------------------|----------|
| Volume Resistivity | >= 1.00e+14 ohm-cm | >= 1.00e+14 ohm-cm | |
| | 3.8 | 3.8 | |
| Dielectric Constant | @Frequency 60.0 Hz, | @Frequency 60.0 Hz, | |



| Electrical Properties | Temperature 25.0 °C Metric | Temperature 77.0 °F English | Comments |
|-----------------------|-------------------------------|--------------------------------|----------|
| Dielectric Strength | 17.3 kV/mm | 440 kV/in | |
| | @Thickness 3.17 mm | @Thickness 0.125 in | |

| Processing Properties | Metric | English | Comments |
|-----------------------|----------------------|----------------------|-----------------------------------|
| Cure Time | 120 - 180 min | 2.00 - 3.00 hour | |
| | @Temperature 93.3 °C | @Temperature 200 °F | |
| | 120 - 180 min | 2.00 - 3.00 hour | Overnight at 75°F followed by |
| | @Temperature 93.3 °C | @Temperature 200 °F | Overnight at 75 F followed by |
| | 1440 - 2880 min | 24.0 - 48.0 hour | |
| | @Temperature 22.2 °C | @Temperature 72.0 °F | |
| Pot Life | 30 - 50 min | 30 - 50 min | 100 gram mass |
| Shelf Life | 12.0 Month | 12.0 Month | in original, unopened containers |
| | @Temperature 23.9 °C | @Temperature 75.0 °F | in original, unoperieu containers |

| Descriptive Properties | Value | Comments |
|------------------------|--------|-----------|
| Mixing Ratio (A to B) | 100:50 | by weight |

Contact Songhan Plastic Technology Co.,Ltd.

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China