

## Tra-Con Tra-Bond 2211 High Temperature Epoxy Adhesive

Category : Polymer , Adhesive , Thermoset , Epoxy

**Material Notes:**

TRA-BOND 2211 is a low viscosity epoxy adhesive system recommended for industrial bonding applications where superior wetting and good mechanical and electrical insulation performance features are required at both low and high temperatures (up to 190°C). This all-liquid formulation contains no solvents, and is easily mixed, handled and applied at room temperature, however a final elevated temperature cure step is REQUIRED for satisfactory bonds. Fully cured TRA-BOND 2211 develops strong, tough bonds for a wide range of materials which includes most metals, glass, ceramics, and many rigid plastics. It has excellent impact and thermal shock resistance, low permeability to gases and vapors, and outstanding resistance to water, weather, oxygen and ozone, most petroleum fuels and lubricants, mild acids and alkalis, and many other organic and inorganic compounds. An additional post-cure of 4 hours at 125°C is recommended when application temperatures higher than 125°C are anticipated. Information provided by Tra-Con Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Tra-Con-Tra-Bond-2211-High-Temperature-Epoxy-Adhesive.php](http://www.lookpolymers.com/polymer_Tra-Con-Tra-Bond-2211-High-Temperature-Epoxy-Adhesive.php)

| Physical Properties | Metric                          | English                         | Comments     |
|---------------------|---------------------------------|---------------------------------|--------------|
| Specific Gravity    | 1.17 g/cc                       | 1.17 g/cc                       | Mixed        |
| Viscosity           | 2000 cP<br>@Temperature 25.0 °C | 2000 cP<br>@Temperature 77.0 °F | After mixing |

| Mechanical Properties   | Metric     | English        | Comments                         |
|-------------------------|------------|----------------|----------------------------------|
| Hardness, Shore D       | 88         | 88             |                                  |
| Tensile Strength, Yield | 55.2 MPa   | 8000 psi       |                                  |
| Elongation at Yield     | 3.0 %      | 3.0 %          |                                  |
| Adhesive Bond Strength  | 7.24 MPa   | 1050 psi       | Lap shear, alum to alum, @ 165°C |
|                         | 13.8 MPa   | 2000 psi       | Lap shear, alum to alum, @ 125°C |
|                         | 17.2 MPa   | 2500 psi       | Lap shear, alum to alum, @ 25°C  |
| Izod Impact, Notched    | 0.267 J/cm | 0.500 ft-lb/in |                                  |

| Thermal Properties               | Metric   | English  | Comments |
|----------------------------------|----------|----------|----------|
| Maximum Service Temperature, Air | 190 °C   | 374 °F   |          |
| Minimum Service Temperature, Air | -60.0 °C | -76.0 °F |          |

| Electrical Properties | Metric          | English         | Comments |
|-----------------------|-----------------|-----------------|----------|
| Volume Resistivity    | 2.50e+15 ohm-cm | 2.50e+15 ohm-cm |          |

| Electrical Properties | Metric 12 ohm-cm    | English 2 ohm-cm    | Comments |
|-----------------------|---------------------|---------------------|----------|
|                       | @Temperature 150 °C | @Temperature 302 °F |          |
| Dielectric Constant   | 4.2                 | 4.2                 |          |
|                       | @Frequency 1000 Hz  | @Frequency 1000 Hz  |          |
| Dielectric Strength   | 14.8 kV/mm          | 375 kV/in           |          |
| Dissipation Factor    | 0.020               | 0.020               |          |
|                       | @Frequency 1000 Hz  | @Frequency 1000 Hz  |          |

| Processing Properties | Metric  | English   | Comments                                 |
|-----------------------|---------|-----------|--|
| Cure Time             | 960 min | 16.0 hour | 12hrs @ 25°C + 2hrs @ 65°C + 2hrs @ 90°C |
| Pot Life              | 300 min | 300 min   |  |

| Descriptive Properties     | Value  | Comments       |
|----------------------------|--------|----------------|
| Color                      | Amber  |                |
| Mix Ratio, parts by weight | 100/20 | Resin/Hardener |
| Outgassing, NASA           | Passes |                |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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