



TDS
MXCUR[®] 350

PRODUCT SPECIFICATION

MXCUR[®]350

Description:

MXCUR[®] 350 is a low to medium viscosity, fast curing, single component Urethane Methacrylate adhesive. **MXCUR[®] 350** is specifically formulated for glass to glass, glass to metal bonding. **MXCUR[®] 350** cures rapidly when exposed to ultra violet radiation specifically in the UVA region. Strength retention is excellent when exposed to water and humidity

Typical Properties of Cured/Uncured Material:

| Uncured State Physical Properties | | Physical Properties of Cured Materials | | |
|---|--------------------------------|---|------------------------|------|
| Base | Acrylic | Full strength achieved after correct UV exposure. | | |
| Colour | Transparent liquid | Coefficient of thermal expansion, ASTM D696, 1°K: | 100 x 10 ⁻⁶ | |
| Chemical Form | Urethane Methacrylate | Coefficient of thermal conductivity, ASTM C177, W.mK: | 0.1 | |
| Cure | Ultraviolet (UV) | Electrical Properties | | |
| Secondary Cure | None | Volume Resistivity (ASTM D257) Ω.cm | 2 x 10 ¹⁵ | |
| Fluorescence | No | Dielectric strength (ASTM D149) kV/mm | 50 | |
| Components | Single requires no mixing | Dielectric constant & loss | | |
| Viscosity | Medium | (ASTM D150, DIN 53483, IEC 250, BC 4542) | Constant | Loss |
| Strength | High | 100Hz | 3.4 | 0.03 |
| Application | Glass to Glass, Glass to Metal | 1000Hz | 3.4 | 0.03 |
| Specific Gravity @ 25°C | 1.10 | 10000Hz | 3.4 | 0.03 |
| Viscosity @ 25°C | 1200 – 2000 mPas | Dielectric Constant / Dissipation Factor, IEC 60250 | | |
| Flash Point | See MSDS | 100-Hz | 4.56 / 0.05 | |
| UV Intensity 365nm (20mWcm ²) | | 1-kHz | 4.41 / 0.02 | |
| Cure Speed (Seconds to achieve handling strength) | 3 secs | 1-MHz | 4.02 / 0.03 | |
| Depth of cure at same time | 1.5mm | Performance of Cured Material | | |
| Depth of cure (x4 exp. Time) | 2.5mm | Tensile strength, steel to glass, N/mm ² (modified ASTM/DIN/modified DIN 53288) UV 365nm/100mW/cm ² 100 seconds | N/mm ² | |
| (5mWcm ²) Fixture Time | 10 secs | | | |

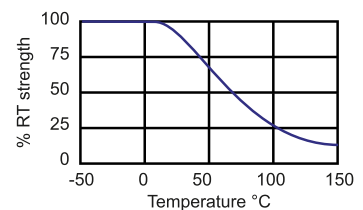
Environmental Resistance

Hot Strength

Strength test procedure: ASTM D2095. DIN 53288

Substrate: Grit blasted mild steel pin to glass.

Cure procedure: 1 week 22°C after exposure for 10 seconds at 100mW/cm² 365 nm

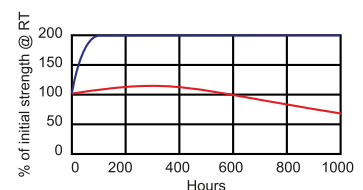


Heat Aging

Strength test procedure: ASTM D2095

Substrate: Grit blasted mild steel pin to glass.

Cure procedure: 1 week 22°C after exposure for 10 seconds under 365nm



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Chemical/Solvent Resistance

Strength test procedure: ASTM D2095

Substrate: Grit blasted mild steel pin to glass.

Cure procedure: 1 week 22°C after exposure for 10 seconds at 100mW/cm² 365 nm

| Environment | °C | % of initial strength | | |
|------------------------------|----|-----------------------|---------|----------|
| | | 100 hrs | 500 hrs | 1000 hrs |
| 90% R.H.: | 40 | 50 | 35 | 25 |
| Petrol | 22 | 100 | 100 | 85 |
| 1.1.1. Trichloroethane | 22 | 100 | 100 | 100 |
| Freon TA | 22 | 100 | 100 | 100 |
| Industrial Methylated Spirit | 22 | 100 | 100 | 100 |

General Information:

This product is not recommended for use in pure oxygen and/or oxygen rich systems and not be used with chlorine or Other strong oxidising materials. For information on the safe handling of this product, consult the **Material Safety Data Sheet, (MSDS)**. Where washing systems are used to clean the surfaces before bonding, it is important to check the Compatibility of the washing solutions can affect the cure and performance of the adhesive.

Handling & Storage

Storage: Keep products in the unopened container in a cool dry location. The product is best when stored at 8 to 21°C. temperatures less than 2°C can adversely affect product properties. Do not freeze. Keep container tightly closed until ready for use. For long term storage keep in refrigeration at 5°C unless otherwise labelled.

Handling: Material removed from containers may be contaminated during use. Do not pour back any product to the original Container. Misuse of product will void all warranties.

Precaution

1. Use with proper ventilation. Avoid contact with skin and eyes.
2. If contact with skin occurs, rinse with warm water or dissolve with appropriate debonder. Do not try to remove forcibly.
3. If adhesive gets into your eye, keep eye open and rinse thoroughly. Seek medical attention immediately.
4. Keep well out of reach of children.
5. Keep adhesive in a cool dry place 8°C to 21°C.

Revision date: 01/2025 - Revision: 04

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Disclaimer:

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