



TDS
MXCUR[®] 349

PRODUCT SPECIFICATION

MXCUR[®]349

Description:

MXCUR[®] 349 is a medium viscosity, fast curing, single component modified methacrylate ester adhesive. **MXCUR[®] 349** is specifically formulated for glass to glass bonding. **MXCUR[®] 349** cures rapidly when exposed to ultra violet Radiation specifically in the Ultraviolet (UV) light region.

Typical Properties of Cured/Uncured Material:

Uncured State Physical Properties		Properties of Cured Materials	
Base	Acrylic	Coefficient of thermal expansion, ASTM D 696, K ⁻¹	100 x 10 ⁻⁶
Colour	Transparent, pale yellow colour	Coefficient of thermal conductivity, ASTM C 177	0.1 W/(m·K)
Chemical Form	Modified methacrylate ester	Electrical Properties	
Cure	Ultraviolet (UV)	Volume Resistivity, IEC 60093, ·cm	5 x 10 ¹⁵
Secondary Cure	None	Dielectric Breakdown Strength, IEC 60243-1	90 kV/mm
Components	Single requires no mixing	Dielectric Constant / Dissipation Factor, IEC 60250	1-kHz 3.55 / 0.025
Viscosity	Medium	Cured @ 100 mW/cm ² @ 365 nm for 40 seconds Lap Shear Strength, ISO 6992	
Application	Bonding	Steel Pin Grit blasted to Glass	N/mm ² 11 (psi) (1,600)
Specific Gravity @ 25°C	1.02		
Viscosity @ 25°C	500 – 1050 mPas		
Flash Point	See MSDS		

Fixture Time

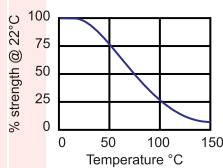
Fixture Time is defined as the time to develop shear strength of 0.1 N/mm² UV fixture time, ISO 4587, Glass Microscope slides seconds:

- 6 mW/cm² @ 365nm 3 to 8
- 100 mW/cm² @ 365nm 1 to 5

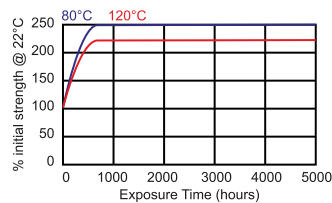
Environmental Resistance

Cured @ 100 mW/cm² @ 365 nm for 10 seconds plus 1 week @ 22°C Tensile Strength, ISO 6899: Steel pin (Grit blasted) to glass

Hot Strength



Heat Aging

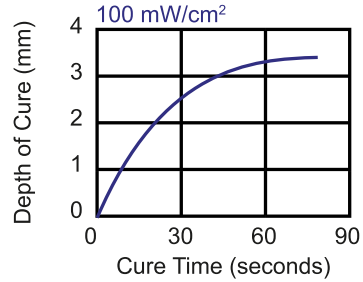


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MXCUR®011

Depth of Cure vs. Intensity

The graph shows the increase in depth of Cure with time at 100 mW/cm² as measured from the thickness of the cured pellet formed in a 15mm Diameter PTFE die.



Chemical/Solvent Resistance

Aged under conditions indicated and tested @ 22°C

Environment	°C	% of initial strength		
		100 h	500 h	1000 h
90% R.H.:	40	100	100	70
Unleaded Petrol	22	100	100	100
Freon TA	22	100	100	100
Industrial methylated spirits	22	100	100	100

Revision date: 01/2025 - Revision: 07



CartellUK

adhesive experts

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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.

Disclaimer:

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