



TDS

MXCUR[®] 011

PRODUCT SPECIFICATION

MXCUR[®]011

Description:

MXCUR[®]011 is a low viscosity, fast curing, single component acrylate adhesive. **MXCUR[®]011** is specifically formulated for bonding and sealing clear glass. The low viscosity makes it ideal for applications where wicking of the adhesive into preassembled parts is required. **MXCUR[®]011** cures rapidly when exposed to ultra violet specifically in the UV-A 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 straw colour	Coefficient of thermal conductivity, ASTM C 177	0.1 W/(m·K)
Chemical Form	Acrylate	Glass Transition Temperature, ASTM E 228, °C	45
Cure	Ultraviolet (UV)	Volumetric Shrinkage	8%
Cure Benefit	Production – High Speed Curing	Shore Hardness, ASTM D 2240, Durometer D	68
Components	Single requires no mixing	Elongation, at break, ASTM D 882, %	160%
Viscosity	Low	Tensile Strength, at break, ASTM D 882	N/mm ² 9 (psi) (13K)
Application	Bonding	Tensile Modulus, ASTM D 882	N/mm ² 420 (psi) (13K)
Specific Gravity @ 25°C	1.03	UV Depth of Cure, 100 mW/cm ² @ 365nm 20 secs	≤0.8Nm
Viscosity @ 25°C	60 – 120 mPas	Adhesive Properties	
Flash Point	See MSDS	Typical Value	
Adhesive Properties		Typical Value	
		Cured @ 100 mW/cm ² @ 365 nm for 40 seconds Lap Shear Strength, ISO 4587	
		PVC to Glass	N/m ² 1 to 5 (psi) (725 to 2175)
		ABS to Glass	N/m ² 1 to 5 (psi) (725 to 2175)
		Polycarbonate to Glass	N/m ² 1 to 5 (psi) (725 to 2175)
Steel pin (grit blasted) to glass	N/m ² 5 to 15 (psi) (725 to 2175)		

UV Intensity

This product is cured when exposed to UV radiation of 365nm. To obtain full cure on surfaces exposed to air, Radiation @ 250 nm is also required.

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 ≤10
- 100 mW/cm² @ 365nm ≤5

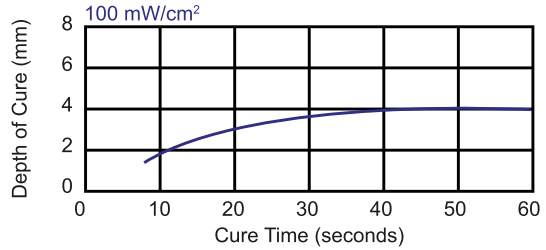
Environmental Resistance

Cured @ 100 mW/cm² @ 365 nm for 10 seconds plus 1 week @ 22°C Tensile Strength, ISO 6899:

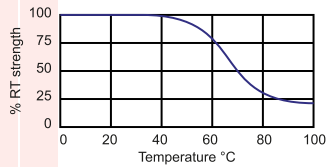
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Depth of Cure vs. Intensity

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.

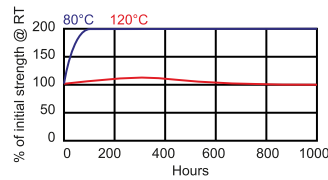


Hot Strength



Heat Aging

Aged at temperature indicated and tested at 22°C



Chemical/Solvent Resistance

Aged under conditions indicated and tested @ 22°C

Environment	°C	% of initial strength		
		100 h	500 h	1000 h
Unleaded Petrol	22	85	85	85
Freon TA	22	85	75	0
Industrial methylated spirits	22	80	10	0
Heat/humidity 90% RH	40	65	40	30

Revision date: 01/2025 - Revision: 04



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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