

Product 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 or humidity.

MXCUR[®] 350 offers the following characteristics:

Technology	Acrylic
Appearance (uncured)	Clear
Chemical Form	Urethane Methacrylate
Cure	UV
Secondary cure	None
Fluorescence	No
Components	Single – requires no mixing
Viscosity	Medium
Strength	High
Application	Glass to Glass, Glass to Metal

Properties of Uncured Material

	Typical Value
Specific Gravity @ 25°C	1.10
Viscosity @ 20°C	1200 ~ 2000mPas
Flash Point	See MSDS

UV Intensity

365nm	Cure speed (number of seconds to achieve handling strength), seconds:	3
(20mW/cm ²)	Depth of cure at same time, mm:	1.5
	Depth of Cure (x4 exp. Time) mm:	2.5
(5mW/cm ²)	Dry surface time:	Not recommended
	Fixture time, seconds:	10

Properties of Cured Material

Physical properties

Full strength achieved after correct UV exposure.

Coefficient of thermal expansion,

ASTMD696, 1/°K: 100×10^{-6}

Coefficient of thermal conductivity

ASTMC177, W.mK: 0.1

Electrical properties

Volume resistivity (ASTM D257) Ω.cm	2 x 10 ¹⁵	
Dielectric strength (ASTM D149) kV/mm	50	
Dielectric constant & loss (ASTMD150, DIN 53483, IEC 250, BC 4542)	Constant	Loss
	100Hz	3.4 0.03
	1000Hz	3.4 0.03
	10000Hz	3.4 0.03

Performance of Cured Material

Tensile strength, steel to glass, N/mm²
(modified ASTM/DIN/modified DIN 53288)

UV 365nm/100mW/cm²

100seconds 6 to 15

Environmental Resistance

Hot Strength

Strength test procedure: ASTM D2095.

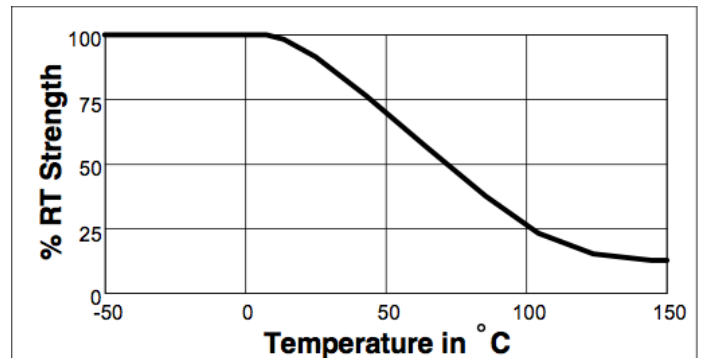
DIN 53288

Substrate: Grit blasted mild steel pin to glass.

Cure procedure:

1 week 22°C after exposure for

10 seconds at 100mW/cm² 365 nm

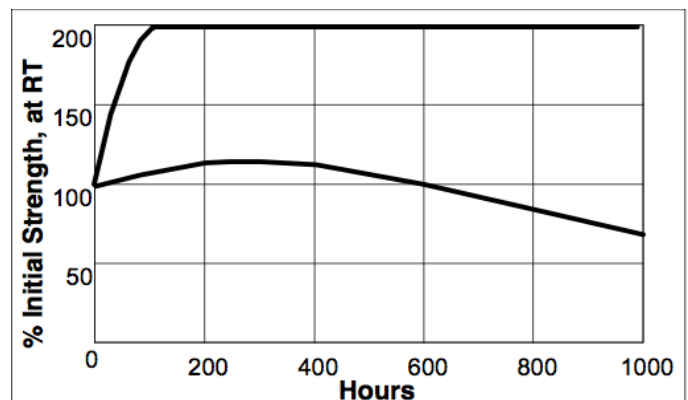


Heat aging

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 365 nm.



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 - 365nm

Solvent Temperature %	Initial strength retained at	100hrs		
		500hrs	1000hrs	
90% R.H.:	40°C	50	35	25
Petrol	22°C	100	100	85
1.1.1. Trichloroethane	22°C	100	100	100
Freon TA	22°C	100	100	100
Industrial Methylated Spirit	22°C	100	100	100

General information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should 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 solution with the adhesive. In some cases these solutions can affect the cure and performance of the adhesive.

Precaution

1. Use with proper ventilation. Avoid contact with skin and eyes.
2. If contact with skin occurs, rinse with warm water and soap.
3. If adhesive gets into eye, keep eye open and rinse thoroughly. Seek medical attention immediately.
4. Keep well out of reach of children.

Storage

Keep adhesive in a cool, dry place optimal storage 8°C-28°C. is recommended unless otherwise labelled. To prevent contamination of unused material, do not return any product to its original container. For specific shelf life information, contact Cartell UK Ltd. Avoid direct sunlight.

However, Cartell UK Ltd does not assume responsibility for any results obtained by persons over whose methods Cartell UK Ltd has no control. It is the user's responsibility to determine the suitability of Cartell UK's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Cartell UK Ltd's products. Cartell UK Ltd specifically disclaims all warranties express or implied, including warranties of salability and suitability for a particular purpose arising from sale or use of Cartell UK Ltd's products. Cartell UK Ltd further disclaims any liability for consequential or incremental damages of any kind including lost profits.

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Cartell Chemical Co., Ltd
 NO.18 Cheng Gong Street. Min-Shyong Industrial Park,
 Chia Yi Hsien, (621) Taiwan
 Tel: +886 (0) 5 2203715 Fax +886 (0) 5 2203720
For sales and technical support visit: www.cartell.com
Email: sales@mxbon.com