

PRODUCT DESCRIPTION

MXBON® 41230 is primarily designed for bonding metal and glass.

Chemical Type	Acrylated urethane
Appearance (uncured)	Transparent to slightly hazy liquid
Components	One component – requires no mixing
Viscosity	Medium
Cure	Ultraviolet (UV) light
Application	Bonding
Specific Gravity @25 °C	1.1
Viscosity, mPa·s (cP) Brookfield-RVT (@25 °C)	
Spindle 6, 20 rpm	15,000 to 23,000
Shelf life	Storage in 8 °C to 21 °C , 12 months (Unopened condition)

TYPICAL CURING PERFORMANCE

MXBON® 41230 can be cured by 365nm UV light. To obtain full cure on surfaces exposed to air, radiation 220 to 260 nm is also required. Fixture time and cure speed achieved depend on substrate used, bonding gap, UV intensity, exposure time and spectrum distribution of light source.

Tack free time

The tack free time is the time the product must be irradiated with light energy to form a tack free surface

Metal halogen lamp:
100 mW/cm² @ 365nm ≤20s

FIXTURE TIME

Fixture time is defined as the time to develop a shear strength of 0.1 N/mm².

UV Fixture Time, Glass microscope slides, seconds:
12 mW/cm²@LED 365nm ≤5s

TYPICAL PROPERTIES OF CURED MATERIAL

Metal halogen lamp, 30 mW/cm² @ 365nm, 60s

Physical Properties

Durometer(Shore D), ISO 868 68
Elongation, at break, ISO 527-3, % 240
Tensile strength, at break, ISO 527-3, N/mm² 21
UV Depth of Cure, mm
100 mW/cm²@LED 365nm 15s 1.9 to 2.2

TYPICAL PERFORMANCE OF CURE MATERIAL

Tensile strength, ISO 6922 :

Metal halogen lamp, 30 mW/cm² @365nm, 30s

Substrate	N/mm ²	psi
Stainless steel pin / Glass	12	1740

TYPICAL ENVIRONMENTAL RESISTANCE

Tensile strength, ISO 6922 :

Metal halogen lamp, 30 mW/cm² @365nm, 30s

Stainless steel pin / Glass

Environment	% of initial strength	
	500hr	1000hr
120°C	50	49
85°C 85%RH	65	48

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be use with chlorine or other strong oxidizing materials. 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. Users are recommended to confirm compatibility of the product with such substrates.

Storage & Handling precaution

Keep adhesive in a cool and dry place. The storage temperature is recommended at 8 °C to 21 °C. Shelf life is one years from the date of manufacture in the original container under the optimal conditions.

1. Avoid contact with skin and eyes.
2. If contact with skin, rinse with water.
3. If adhesive gets into eye, keep eye open and rinse with water thoroughly. Seek medical attention immediately.
4. Keep the material out of children's reach.

Note

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