



4-20418-GEL

Low-Stress Plastic and Glass Bonder

Dymax 4-20418-GEL adhesive provides rapid bonding and laminating to glass, metal, and many plastics such as ABS, acrylics, polycarbonate, polyurethane, and styrene. This solvent-free, visible and/or UV-curable adhesive dispenses easily and cures quickly for precise quantity and placement of adhesive. Bonds resist yellowing in the sun and demonstrate good performance in thermal cycling. This product is in full compliance with RoHS directives 2015/863/EU.

TYPICAL UNCURED PROPERTIES *		
Property	Value	Test Method
Solvent Content	No Nonreactive Solvents	N/A
Chemical Class	Acrylated Urethane	N/A
Appearance	Colorless	N/A
Soluble in	Organic Solvents	N/A
Viscosity, cP (20 rpm)	35,000	ASTM D1084
Shelf Life at Recommended Conditions from Date of Manufacture	18 months	N/A

CURED MECHANICAL PROPERTIES *		
Property	Value	Test Method
Durometer Hardness	D60	ASTM D2240
Tensile at Break, MPa [psi]	11.4 [1,650]	ASTM D638
Elongation at Break, %	130%	ASTM D638
Modulus of Elasticity, MPa [psi]	689.5 [100,000]	ASTM D638

OTHER CURED PROPERTIES *		
Property	Value	Test Method
Boiling Water Absorption, % (2 h)	4.4	ASTM D570
Water Absorption, % (25°C, 24 h)	4.1	ASTM D570
Coefficient of Thermal Expansion	95×10^{-6} in/in/°C	ASTM E831

TYPICAL PERFORMANCE OF CURED MATERIAL *		
Property	Value	Test Method
Glass-to-Stainless Steel Compression, psi	2,250 (glass shatters)	DSTM 251‡
Glass-to-Glass Compression, psi	2,750 (glass shatters)	DSTM 250‡

* Not Specifications

N/A Not Applicable

‡ DSTM Refers to Dymax Standard Test Method

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Technical Data Collected Prior to 1997 Rev.02/10/2023





CURING GUIDELINES

Lamp	2000-EC	5000-EC	PC-3	3000-EC UV Spot
Light Type	UV	UV	UV	UV
Lamp Type	Flood	Flood	Flood	Flood
Intensity (mW/cm ²) at Peak Wavelength	50 @ 365 nm	150 @ 365 nm	1,000 @ 365 nm	1,800 @ 365 nm
Wavelength (nm) Working Range Cure Speed (sec)	300-500	300-500	300-500	300-500
Between Glass	5	5	5	4
1/8" Bead	8	7	6	5
Cure Depth in 1 Minute (inch)	0.16	0.25	0.29	0.300

DISPENSING SUPPORT

The Dymax Application Engineering team is ready to discuss your application requirements to provide the most appropriate dispensing and/or spraying solution. Visit our current dispensing equipment portfolio [here](#) or consult our [global contact](#) phone numbers and online chat feature (available in North America only) during normal business hours for instant support.

STORAGE AND SHELF LIFE

Store material in cool, dark place when not in use. Do not expose to UV light or sunlight. Material may polymerize upon prolonged exposure to ambient light. Replace lid immediately after use. This material shelf life is noted on page 1 of this document, when stored between 10°C (50°F) and 32°C (90°F) in the original container.

GENERAL INFORMATION

This product is intended for industrial use only. Keep out of the reach of children. Avoid breathing vapors. Avoid contact with skin, eyes, and clothing. Wear impervious gloves. Repeated or continuous skin contact with uncured material may cause irritation. Remove material from skin with soap and water. Never use organic solvents to remove material from skin and eyes. For more information on the safe handling of this material, please refer to the Safety Data Sheet before use.

The data provided in this document are based on historical testing that Dymax performed under laboratory conditions as they existed at that time and are for informational purposes only. The data are neither specifications nor guarantees of future performance in a particular application. Dymax does not guarantee that this product's properties are suitable for the user's intended purpose.

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INDUSTRIAL ADHESIVES
4-20418-GEL Product Data Sheet

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