

1185-M Series Flexible, Fluorescing PVC Bonders

APPLICATIONS	FEATURES	BONDS	BIO-APPROVALS
<ul style="list-style-type: none"> • Tubing • Connectors • Fittings 	<ul style="list-style-type: none"> • Cure in Seconds through UV Blocked Plastics • Fluoresce Under Black Light 	<ul style="list-style-type: none"> • PVC • ABS • Polycarbonate • Polystyrene • Polyurethane 	<ul style="list-style-type: none"> • ISO 10993-Elution Systemic Injection, Intracutaneous, Implantation, Hemolysis • USP Class VI requirements are met as a result of the ISO 10993 tests conducted

Dymax MD® adhesives are solvent-free and cure only upon exposure to UV light. Their ability to cure in seconds enables faster processing, greater output, and lower assembly costs. When cured with Dymax MEDI-CURE® spot, focused beam, or flood lamps, they deliver optimum speed and performance for medical device assembly while enhancing worker safety. This product is in full compliance with RoHS directives 2015/863/EU.

TYPICAL UNCURED PROPERTIES

Solvent Contents	None - 100% Solids	
Composition	Urethane Oligomer/(Meth) Acrylate Monomer Blends	
Appearance	Clear/Light Amber Liquid	
Flash Point	>93°C (200°F)	
Solubility	Alcohol/Chlorinated Solvents	
Toxicity	Low	
Viscosity	1185-VLV	200 cP (nominal) ASTM D-1084
	1185-M	600 cP (nominal) ASTM D-1084
	1185-M-Gel	25,000 cP (nominal) ASTM D-2556

TYPICAL CURED PROPERTIES

PHYSICAL

Durometer Hardness	D70	ASTM D-2240
Tensile at Break	3,000 psi	ASTM D-638
Elongation at Break	40%	ASTM D-638
Modulus of Elasticity	100,000 psi	ASTM D-638
Water Absorption (24 h)	6%	ASTM D-570
Boiling Water Absorption	5%	ASTM D-570
Linear Shrinkage	2.1%	ASTM D-2566



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CURE DATA - Using 365 nanometer UV light. Use of lamps that emit high levels of shortwave light (for example, more than 15% 200-300 nanometer UV light) are not recommended.

TYPICAL LIGHT CURE DATA

Lamp	MC-5000	BlueWave [®] 200	UVC 6 CONVEYOR*
Light Type	UV/Visible	UV/Visible	UV/Visible
Lamp Type	5" x 5" Flood	3/16" Spot	1" x 6" Focused Beam
Maximum Lamp Intensity @ 365 nm	300 mW/cm ²	20,000 mW/cm ²	8000+ mW/cm ²
Intensity @ Time Of Test @ 365 nm	150 mW/cm ²	8,000 mW/cm ²	4000 mW/cm ²
Adhesive Absorption Range (nm)	300-500	300-500	300-500
Equipment Output Range (nm)	300-500	300-500	300-500
Cure Speed (Sec)			
Fixture Between Glass Slides	<1	<1	<1
Tack Free Surface Cure	15	1	<1
Nominal Cure Depth (0.125")	15	1	<1
Cure Depth In 1 Minute (Inch)	>0.25	>0.25	>0.25

* Equipped with Fusion "D" bulb

DISPENSING AND HANDLING ADHESIVE

Dymax 1185-M Series adhesives are available in various packages such as syringes, cartridges, bottles, and pails. They may be dispensed with a variety of automatic bench-top syringe applicators or other equipment as required. Any questions relating to dispensing and curing systems for specific applications should be referred to Dymax Application Engineering.

STORAGE AND SHELF LIFE

Store the material in a cool, dark place when not in use. Do not expose to light. This product may polymerize upon prolonged exposure to ambient and artificial light. Keep covered when not in use. This material has an 18-month shelf life from date of manufacture, unless otherwise specified, when stored between 10°C (50°F) and 35°C (90°F) in the original, unopened container.

BIOCOMPATIBILITY & STERILIZATION

Dymax Medical Device adhesives are subjected to various biocompatibility tests in accordance with USP Class VI and/or ISO 10993 recommendations for disposable medical devices. The completed tests are identified on each Product Data Sheet, certificate copies of which are available upon request. Unless otherwise noted on the PDS, these adhesives have not been tested for prolonged or permanent implantation. In all cases, it is the user's responsibility to determine and validate the suitability of these adhesives in the intended medical device.

SME Technical Paper #AS91-397, 1991 advises that "All adhesives are toxic in their raw or uncured state. Complete cure...is required to retain Class VI certification status." It is recommended that biocompatibility testing of the completed device be done following sterilization to eliminate the effects of minor process variations and contamination during assembly. The sterilization methods of choice are gamma irradiation and ethylene oxide. Sterilization by autoclaving may be limited to certain applications. Gamma irradiation is known to polymerize unsaturated systems. However, it remains the user's obligation to ascertain the effectiveness of such a procedure.

SAFETY

Wear impervious gloves and/or barrier cream. Repeated or continuous skin contact with liquid adhesive will cause irritation and should be avoided. Do not wear absorbent gloves. Remove adhesive from skin with soap and water. Never use solvents to remove adhesive from skin or eyes.

CAUTION

For industrial use only. Avoid breathing vapors. Avoid contact with eyes and clothing. In case of contact, immediately flush with water for at least 15 minutes; for eyes, get medical attention. Wash clothing before reuse. Keep out of reach of children. Do not take internally. If swallowed, vomiting should be induced at once and a physician called. For specific information, refer to the Material Safety Data Sheet before use.

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.

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