

Appendix B
UV Curable Coating Used at DRS Sensors & Targeting Systems

Dymax Corporation

51 Greenwood Rd, Torrington, CT 06790 Phone: (860) 482-1010 Fax: (860) 482-1308

MATERIAL SAFETY DATA SHEET PRODUCT 984-LVF

I. PRODUCT IDENTIFICATION

Product Name: 984-LVF
Synonyms: Polyurethane Oligomer Mixture

NFPA Est:	HMIS Est:
Health: 2	Health 2
Fire: 1	Flam: 1
React: 1	React: 1

II. COMPOSITION

Ingredient	Concentration	C.A.S.	ACGIH TLV
	%	Number	
High Boiling (Meth)Acrylate	45-55	PROPRIETARY	--
Acrylic Acid	< 5	79-10-7	2 ppm
Photoinitiator	1-3	947-19-3	--
Polyurethane Oligomer	40-50	PROPRIETARY	--
Photoinitiator	1-5	24650-42-8	--
t-Butyl Perbenzoate	0.1-3	614-45-9	--
High Boiling (Meth)Acrylate	1-10	PROPRIETARY	--

III. CHEMICAL AND PHYSICAL PROPERTIES

Vapor Pressure: 6 mm Hg at 30°C	Vapor Density: Heavier Than Air
Solubility in Water: Insoluble	Specific Gravity: 1.06
Boiling Point: N.A.	Appearance: Amber liquid
Odor: Mild	

IV. FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point: > 200°F (P.M.C.C.)
Recommended Extinguishing Agents: Use water spray, foam, dry chemical, or CO2.
Hazardous Products Formed by Fire
or Thermal decomposition: Toxic fumes (oxides of carbon and nitrogen) may be evolved upon exposure to heat or open flame.
Unusual Fire or Explosion Hazards: None
Compressed Gasses: None Pressure at Room Temp: N.A.

V. REACTIVITY DATA

Stability: Stable Hazardous Polymerization: May occur
Hazardous Decomp. Prod.: None
Incompatibility: Oxidizers, amines, strong Lewis or mineral acids, thiosulfates. Smoke and toxic fumes may be evolved as a result of uncontrolled exothermic reaction of large masses of material reacting with curing agents, such as peroxides, amines, or exposure to light.

VI. SPILL OR LEAK PROCEDURES

Dike area to prevent spreading. Absorb on vermiculite, sand or other inert absorbing material. Dispose of as a chemical waste in accordance with current local, state, and federal regulations.

VII. STORAGE AND HANDLING PROCEDURES

Storage: Avoid storage over 100° F, exposure to light, loss of dissolved air, loss of polymerization inhibitor, contamination with incompatible materials.
Handling: Avoid prolonged or repeated breathing of vapor.

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VIII. SHIPPING REGULATIONS

DOT and IATA Hazard Classification: Not Restricted Article
Proper DOT Shipping Name: Unrestricted
Identification Number: DOT - None IATA - None

IX. EMERGENCY TREATMENT PROCEDURES

Eye Irritation: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact: In case of skin contact, wash thoroughly with soap and water. Do not use organic solvents for cleanup as they may dry or irritate the skin and act as a carrier for chemical absorption.
Inhalation: Remove affected person to fresh air.
Ingestion: Low toxicity; Get medical attention.

X. PERSONAL PROTECTION

Respiratory: Positive fresh air exhaust should be provided in the work area; respiratory equipment is unnecessary in normal use.
Skin: Avoid skin contact. Wear gloves and impervious protective clothing if frequent direct contact is likely.
Eyes: Do not wear contact lenses. Chemical safety goggles are recommended.

XI. HEALTH HAZARD DATA

Potential Routes of Entry: Skin, eyes, inhalation.
Symptoms of Overexposure: Possible skin and eye irritation on contact. Inhalation of vapors in an unventilated area may, over time, induce headaches.

Exposure Limits:	ACGIH (TLV)	OSHA (PEL)	OTHER
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Ingredients

Acrylic Acid	2 ppm	--	--
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	Target Organs:	Carcinogen:		
		NTP	IARC	OSHA
High Boiling (Meth)Acrylate	--	NO	NO	NO
Acrylic Acid	--	NO	NO	NO
Photoinitiator	--	NO	NO	NO
Polyurethane Oligomer	--	NO	NO	NO
Photoinitiator	--	NO	NO	NO
t-Butyl Perbenzoate	--	NO	NO	NO
High Boiling (Meth)Acrylate	--	NO	NO	NO

Abbreviations:

N/A Not Applicable	ALG Allergen
IRR Irritant	KID Kidney
LIV Liver	REP Reproductive

XII. REGULATORY INFORMATION

Sara Listed Ingredients:
ACRYLIC ACID
TSCA Inventory: All Ingredients

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STATE RIGHT-TO-KNOW

CALIFORNIA Proposition 65

This product does not contain materials which the State of California has found to cause cancer, birth defects, or other reproductive harm.

MASSACHUSETTS Right-To-Know, Substance List (MSL) Hazardous Substances and Extraordinary Hazardous Substances on the MSL must be identified when present in products. Components present in this product at a level which could require reporting under the statute are:

** NONE **

PENNSYLVANIA Right-To-Know, Hazardous Substance List Hazardous Substances and Special Hazardous Substances on the List must be identified when present in products. Components present in this product at a level which could require reporting under the statute are:

** NONE **

OTHER REGULATORY INFORMATION:

** NONE **

ABBREVIATIONS:

ACGIH = American Conference of Governmental Industrial Hygienists
OSHA = Occupational Safety and Health Administration
TLV = Threshold Limit Value
PEL = Permissible Exposure Limit
NTP = National Testing Program
IARC = International Agency for Research on Cancer
NFPA = National Fire Protection Association
HMIS = Hazardous Materials Identification System
-- = No Data / Not Available

XIII. PREPARATION INFORMATION

Prepared By: Nicole Langer
Title: Laboratory Manager
24 Hr. Telephone: CHEMTREC 1-800-424-9300
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To the best of our knowledge, the information contained herein is accurate. However, Dymax Corporation does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.