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

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

MATERIAL SAFETY DATA SHEET

PRODUCT 984-LVF

## I. PRODUCT IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>984-LVF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms:</td>
<td>Polyurethane Oligomer Mixture</td>
</tr>
</tbody>
</table>

### NFPA Est.  
- Health: 2
- Fire: 1
- React: 1

### HMIS Est.
- Health: 2
- Flammability: 1
- Reactivity: 1

## II. COMPOSITION

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration %</th>
<th>C.A.S. Number</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Boiling (Meth)Acrylate</td>
<td>45-55</td>
<td>PROPERITARY</td>
<td>--</td>
</tr>
<tr>
<td>Acrylic Acid</td>
<td>&lt; 5</td>
<td>79-10-7</td>
<td>2 ppm</td>
</tr>
<tr>
<td>Photoinitiator</td>
<td>1-3</td>
<td>947-19-9</td>
<td>--</td>
</tr>
<tr>
<td>Polyurethane Oligomer</td>
<td>40-50</td>
<td>PROPERITARY</td>
<td>--</td>
</tr>
<tr>
<td>Photoinitiator</td>
<td>1-5</td>
<td>24450-42-8</td>
<td>--</td>
</tr>
<tr>
<td>t-Butyl Peroxide</td>
<td>6.1-3</td>
<td>614-40-9</td>
<td>--</td>
</tr>
<tr>
<td>High Boiling (Meth)Acrylate</td>
<td>1-10</td>
<td>PROPERITARY</td>
<td>--</td>
</tr>
</tbody>
</table>

## III. CHEMICAL AND PHYSICAL PROPERTIES

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

## IV. FLAMMABILITY AND EXPLOSIVE PROPERTIES

- Flash Point: > 200°F (F.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 Decompos.: None
- Hazardous Polymerization: May occur
- 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.
VIII. SHIPPI NG 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:

<table>
<thead>
<tr>
<th></th>
<th>ACGIH</th>
<th>OSHA</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>(TLV)</td>
<td>(PEL)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ingredients

Acrylic Acid 2 ppm -- --

Target Organs: Carcinogen:

<table>
<thead>
<tr>
<th></th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Boiling (Meth)Acrylate --</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Acrylic Acid --</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Photoinitiator --</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Polyurethane Glimmer --</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Photoinitiator --</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>t-Butyl Perbenzoate --</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>High Boiling (Meth)Acrylate --</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

Abbreviations:

N/A Not Applicable
IR IRRITANT
LIV Liver

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:
AGUA = 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: CHEMTRAC 1-800-424-9300
REVISION DATE: August 23, 2004

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