

Safety Data Sheet

according to HazCom 2012

SDS # : 984-LVF

984-LVF

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Version 3.01

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product identifier****Product Name** 984-LVF**Other means of identification****Product Code** 984-LVF**Synonyms** Not applicable**Recommended use of the chemical and restrictions on use****Identified uses** Adhesives.**Uses advised against** No information available**Details of the supplier of the safety data sheet****Manufacturer Address** Dymax Corporation
318 Industrial Lane
Torrington, CT 06790
Tel: 860-482-1010
Fax: 860-496-0608**Information department:** North American Safety Department @ 1-860-482-1010**Emergency Telephone** North America: Chemtrec @ 1-800-424-9300 (24hrs)**2. HAZARDS IDENTIFICATION****Emergency Overview****Physical state** liquid**Odor** Characteristic**Color** colorless fluorescing**Appearance** transparent**Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Skin sensitization | Category 1B |
| Specific target organ toxicity (single exposure) | Category 3 |

Target Organ Effects

Respiratory system, EYES, Skin.

GHS Label elements, including precautionary statements



Signal word

Danger

Hazard statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

None

Other Information**Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity.

Environmental product testing for acute and chronic aquatic effects determined classification to be Category 3

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Chemical Name | CAS No. | Weight-% | Trade Secret | Classification (Reg. 1272/2008) |
|----------------------------|-------------|----------|--------------|---|
| Acrylate Monomer | Proprietary | 40-69 | * | Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1 (H317) STOT SE 3 (H335) Aquatic Chronic 1 (H411) |
| Methacrylate Ester Monomer | Proprietary | 4-9 | * | Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1 (H317) |
| Acrylic acid | 79-10-7 | 4-9 | * | Flam. Liq. 3 (H226) Acute Tox. 4 (H302) Acute Tox. 4 (H312) |

| | | | | |
|------------------------|-------------|-----|---|---|
| | | | | Acute Tox. 4 (H332) Skin Corr. 1 (H314) Aquatic Acute 1 (H400) |
| tert-Butyl Perbenzoate | 614-45-9 | 1-3 | * | Org. Perox C (H242) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412) |
| Photoinitiator | Proprietary | 1-3 | * | Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) |
| Silane Coupling Agent | Proprietary | 1-3 | * | Skin Sens. 1 (H317) |

Remaining ingredients are not considered hazardous in accordance with the Globally Harmonized System (GHS)

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Eye contact

Flush eyes with water for at least 15 minutes. Get medical attention if eye irritation develops or persists.

Skin Contact

Wash off immediately with plenty of water, Get medical attention if irritation develops and persists.

Inhalation

Remove to fresh air, If symptoms persist, call a physician.

Ingestion

If swallowed, Rinse mouth, Get medical attention.

Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

Main Symptoms

No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use CO₂, dry chemical, or foam.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

Hazardous combustion products

Hazardous decomposition products due to incomplete combustion.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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| 6. ACCIDENTAL RELEASE MEASURES |
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Personal precautions, protective equipment and emergency procedures**Personal precautions**

Ensure adequate ventilation, Wear protective gloves/clothing and eye/face protection.

Environmental precautions**Environmental precautions**

Do not allow material to contaminate ground water system, Try to prevent the material from entering drains or water courses, See Section 12 for additional Ecological Information, Local authorities should be advised if significant spillages cannot be contained.

Other Information

See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up**Methods for containment**

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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| 7. HANDLING AND STORAGE |
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Precautions for safe handling**Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice

Ensure adequate ventilation

Protect from light

Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep container tightly closed in a dry and well-ventilated place

Protect from light

Incompatible products

Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers, Thiosulfates.

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| 8. EXPOSURE CONTROLS/PERSONAL PROTECTION |
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Control parameters**Exposure Guidelines**

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| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|-----------|----------|------------|
|---------------|-----------|----------|------------|

| | | | |
|----------------------------------|---------------|---|--|
| Acrylic acid - 79-10-7 (4-9 %) | TWA: 2 ppm S* | (vacated) TWA: 10 ppm (vacated) TWA: 30 mg/m ³ S* | TWA: 2 ppm TWA: 6 mg/m ³ |
|----------------------------------|---------------|---|--|

ACGIH (American Conference of Governmental Industrial Hygienists)

TLV - Threshold Limit Value

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL - Permissible Exposure Limits

NIOSH IDLH

Immediately Dangerous to Life or Health

Appropriate engineering controls**Engineering Measures**

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Safety glasses with side-shields If splashes are likely to occur, wear: Goggles

Skin and body protection

Wear protective gloves and protective clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required, Do not breathe vapors, mist or gas.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice, When using do not eat, drink or smoke, Wear suitable gloves and eye/face protection, Wash hands before breaks and at the end of workday, Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|---|-----------------------|---------------------------|--------------------------|
| Physical state | liquid | Odor | Characteristic |
| Appearance | transparent | Odor threshold | No information available |
| Color | colorless fluorescing | | |
| Property | Values | Remarks / • Method | |
| pH | | No information available | |
| Melting point / freezing point | | No information available | |
| Boiling point / boiling range | | No information available | |
| Flash point | 108 °C / 226 °F | | |
| Evaporation rate | | No information available | |
| Flammability (solid, gas) | | No information available | |
| Flammability Limit in Air | | | |
| Upper flammability limit | - | | |
| Lower flammability limit | - | | |
| Vapor pressure | | No information available | |
| Vapor density | | No information available | |
| Specific Gravity | | No information available | |
| Water Solubility | Practically insoluble | | |
| Solubility in other solvents | | No information available | |
| Partition coefficient: n-octanol/water | | No information available | |
| Autoignition temperature | | No information available | |
| Decomposition temperature | | No information available | |
| Dynamic viscosity | 150 cP | | |
| Kinematic viscosity | | No information available | |

Explosive properties No information available
Oxidizing properties No information available

Other Information

Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Density No information available
Bulk density No information available

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| 10. STABILITY AND REACTIVITY |
|------------------------------|

Reactivity

No information available

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Protect from light. Heat, flames and sparks.

Incompatible materials

Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers.

Hazardous Decomposition Products

No decomposition if stored and applied as directed.

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| 11. TOXICOLOGICAL INFORMATION |
|-------------------------------|

Information on toxicological effects**Acute toxicity****Information on likely routes of exposure**

| | |
|---------------------|-----------------------------------|
| Inhalation | There is no data for this product |
| Eye contact | There is no data for this product |
| Skin Contact | There is no data for this product |
| Ingestion | There is no data for this product |
| Symptoms | No information available. |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause sensitization of susceptible persons.
Mutagenic effects No information available.
Reproductive toxicity No information available.
Carcinogenicity Contains no ingredients above reportable quantities listed as a carcinogen.
STOT - single exposure

| | |
|------------------------------|--|
| Target Organ Effects | Respiratory system, EYES, Skin. |
| Aspiration hazard | No information available. |
| Other adverse effects | No information available. |
| Chronic toxicity | Repeated contact may cause allergic reactions in very susceptible persons Avoid repeated exposure |

Numerical measures of toxicity - Product Information

0 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

| | |
|--------------------------------------|-------------|
| ATEmix (oral) | 11460 mg/kg |
| ATEmix (dermal) | 22846 mg/kg |
| ATEmix (inhalation-dust/mist) | 36.4 mg/l |
| ATEmix (inhalation-vapor) | 170 mg/l |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------|--|--|--------------------------------------|
| Acrylate Monomer | = 4890 mg/kg (Rat) | > 5 g/kg (Rabbit) | |
| Methacrylate Ester Monomer | = 5050 mg/kg (Rat) | > 3000 mg/kg (Rabbit) | |
| Acrylic acid | = 193 mg/kg (Rat) = 33500 µg/kg (Rat) | = 280 µL/kg (Rabbit) = 295 mg/kg (Rabbit) | = 5300 mg/m ³ (Rat) 2 h |
| tert-Butyl Perbenzoate | = 4838 mg/kg (Rat) | = 3,817 mg/kg (Rabbit) | |
| Photoinitiator | >2000 mg/kg (Rat) | | |
| Silane Coupling Agent | > 5000 mg/kg (Rat) | | |

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Acute aquatic toxicity**Product Information**

Environmental product testing for acute and chronic aquatic effects determined classification to be Category 3

Component Information

| Chemical Name | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates | Toxicity to algae |
|----------------------------|---|---|---|
| Acrylate Monomer | LC50 = 1.8 mg/L 96 h (Danio rerio) | EC 50 = 1.1 mg/L 48 h (Daphnia magna) | ErC 50 = 2.7 mg/L 96 h (Pseudokirchneriella subcapitata) |
| Methacrylate Ester Monomer | LC50 = 227 mg/L 96 h (Pimephales promelas) | EC50 > 380 mg/l 48 h (Daphnia magna) | - |
| Acrylic acid | LC50 = 222 mg/L 96 h (Brachydanio rerio) | EC50 = 95 mg/L 48 h | EC50 0.04 mg/L 72 h (Desmodesmus subspicatus) |
| tert-Butyl Perbenzoate | LC50 1.6 mg/l 96 h (Brachydanio rerio) | EC50 11 mg/L 48 h (Daphnia magna) | EC50 1.3 mg/l 72 h (Pseudokirchneriella subcapitata) |
| Photoinitiator | LC50 6 mg/L 96 h (Lepomis macrochirus) | EC50 26 mg/L 48 h (Daphnia magna) | EC50 0.17 mg/L 72 h |
| Silane Coupling Agent | LC50 > 1024,00 mg/l 96 h (Brachydanio rerio) | EC50 > 876,00 mg/l 48 h (Daphnia magna) | EC50 > 536,00 mg/l 72 h (Scenedesmus subspicatus) |

Persistence and degradability No information available.

Bioaccumulation

Component Information

| Chemical Name | log Pow |
|----------------------------|---------|
| Acrylate Monomer | 4.52 |
| Methacrylate Ester Monomer | 0.47 |
| Acrylic acid | 0.46 |
| tert-Butyl Perbenzoate | 3 |

Mobility in soil

No product level data available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods**Waste Disposal Methods**

Dispose of waste in compliance with local and national regulations.

Contaminated packaging

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated**ICAO/IATA** Not regulated**IMDG/IMO** Not regulated

15. REGULATORY INFORMATION

International Inventories

| | |
|----------------------|------------|
| TSCA | Complies |
| AICS | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECI | Complies |
| NZIoC | Not listed |
| PICCS | Not listed |
| TCSI | Not listed |

Legend:**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**AICS** - Australian Inventory of Chemical Substances**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**NZIoC** - New Zealand Inventory of Chemicals**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**TCSI** - Taiwan Chemical Substance Inventory**US Federal Regulations**

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name | SARA 313 - Threshold Values % |
|---------------|-------------------------------|
| Acrylic acid | 1.0 |

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---------------|--------------------------|----------------|--|
| Acrylic acid | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |

US State Regulations**California Proposition 65**

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

WARNING!

| Chemical Name | California Proposition 65 |
|-----------------------------------|---------------------------|
| Toluene - 108-88-3 (9.4e-005 %) | Developmental |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------|------------|---------------|--------------|
| Acrylic acid | X | X | X |
| tert-Butyl Perbenzoate | X | X | X |
| tert-Butyl hydroperoxide | X | X | X |
| Toluene | X | X | X |

16. OTHER INFORMATION

Prepared By EHS Department
Revision Date 2018-08-17

Revision Note No information available

Disclaimer

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of Dymax Corporation and its subsidiaries and affiliates (DYMAX). The information in this SDS relates only to the specific material designated herein. DYMAX assumes no legal responsibility for use of or reliance upon the information in this SDS.

end

California Proposition 65

WARNING!

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