

Safety Data Sheet

according to HazCom 2012

SDS # : EMAX 905-LV

EMAX 905-LV

Issue Date 2018-01-05

Revision Date 2018-01-05

Version 4

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier**Product Name** EMAX 905-LV**Other means of identification****Product Code** EMAX 905-LV**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****Appearance**

colorless to light yellow

transparent

Classification**OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
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

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H335 - May cause respiratory irritation

H351 - Suspected of causing cancer

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing 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

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

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)
Isobornyl Acrylate	5888-33-5	25-39	*	STOT SE Cat 3 (H335) Skin Irrit. Cat 2 (H315) Eye Irrit. Cat 2A (H319) Skin Sens. Cat 1 (H317)
2-Hydroxyethyl methacrylate	868-77-9	10-24	*	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319)

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Acrylic acid	79-10-7	4-9	*	Skin Sens. 1 (H317) Flam. Liq. 3 (H226) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Corr. 1A (H314) Aquatic Acute 1 (H400)
Photoinitiator	Proprietary	1-3	*	Acute Tox. 4 (H302) Aquatic Chronic 2 (H411)
tert-Butyl Perbenzoate	614-45-9	<1	*	Org. Perox C (H242) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)
Silane Coupling Agent	Proprietary	<1	*	Skin Sens. 1 (H317)
Visible Photoinitiator	Proprietary	<1	*	Skin Sens. 1 (H317) Aquatic Chronic 4 (H413)
Photoinitiator	Proprietary	<1	*	STOT RE 2 (H373) Aquatic Chronic 3 (H412)
Mequinol	Proprietary	<1	*	Acute Tox. Cat 4 (H302) Eye Irrit. Cat 2 (H319) Skin Sens. Cat 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 (NOx), 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.

6. ACCIDENTAL RELEASE MEASURES**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).

7. HANDLING AND STORAGE**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.

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

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acrylic acid 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
Mequinol <1	TWA: 5 mg/m ³	(vacated) TWA: 5 mg/m ³	TWA: 5 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 to light yellow		
Property	Values	Remarks / • Method	
pH		No information available	
Melting point / freezing point		No information available	
Boiling point / boiling range		No information available	
Flash point	101 °C / 213 °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

850 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

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.

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

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Chemical Name	ACGIH	IARC	NTP	OSHA
Photoinitiator		Group 2B		X

Legend

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

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

X - Present

Target Organ Effects

Respiratory system, EYES, Skin.

Aspiration hazard

No information available.

Other adverse effects

No information available.

Chronic toxicityRepeated 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) 11014 mg/kg

ATEmix (dermal) 24974 mg/kg

ATEmix (inhalation-dust/mist) 35.9 mg/l

ATEmix (inhalation-vapor) 263 mg/l

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isobornyl Acrylate	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	
2-Hydroxyethyl methacrylate	= 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
Photoinitiator	> 1700 mg/kg (Rat)	6929 mg/kg (Rat)	
tert-Butyl Perbenzoate	= 4838 mg/kg (Rat)	= 3,817 mg/kg (Rabbit)	
Silane Coupling Agent	> 5000 mg/kg (Rat)		
Visible Photoinitiator		> 2,000 mg/kg (Rat)	
Photoinitiator	> 10 g/kg (Rat)	= 3535 mg/kg (Rabbit)	
Mequinol	= 1600 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	

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 algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Isobornyl Acrylate	ErC 50 = 2.7 mg/L 96 h (Pseudokirchneriella subcapitata)	LC50 = 1.8 mg/L 96 h (Danio rerio)	EC 50 = 1.1 mg/L 48 h (Daphnia magna)
2-Hydroxyethyl methacrylate	-	LC50 = 227 mg/L 96 h (Pimephales promelas)	EC50 > 380 mg/l 48 h (Daphnia magna)
Acrylic acid	EC50 0.04 mg/L 72 h (Desmodesmus subspicatus)	LC50 = 222 mg/L 96 h (Brachydanio rerio)	EC50 = 95 mg/L 48 h
Photoinitiator	EC50 195 mg/l 72 h (green algae)	LC50 160 mg/l 48 h (Leuciscus idus)	EC50 > 119 48 H (Daphnia magna)
tert-Butyl Perbenzoate	EC50 1.3 mg/l 72 h (Pseudokirchneriella subcapitata)	LC50 1.6 mg/l 96 h (Brachydanio rerio)	EC50 11 mg/L 48 h (Daphnia magna)
Silane Coupling Agent	EC50 > 536,00 mg/l 72 h (Scenedesmus subspicatus)	LC50 > 1024,00 mg/l 96 h (Brachydanio rerio)	EC50 > 876,00 mg/l 48 h (Daphnia magna)
Visible Photoinitiator	EC50 > 0.26 mg/l 72 h (Scenedesmus sp.)	LC50 > 0.09 mg/l 96 h (Brachydanio rerio)	EC50 > 1.175 mg/l 48 h (Daphnia magna)
Photoinitiator	-	LC50 43 mg/L 96h (Brachydanio rerio)	EC50 30.1 mg/L 24h (Daphnia magna)
Mequinol	-	LC50 84.3 mg/L 96 h (Pimephales promelas) LC50 28.5 mg/L 96 h (Oncorhynchus mykiss)	-

Persistence and degradability No information available.

Bioaccumulation

Chemical Name	log Pow
Isobornyl Acrylate	4.21
2-Hydroxyethyl methacrylate	0.47
Acrylic acid	0.46
tert-Butyl Perbenzoate	3
Photoinitiator	3.2
Mequinol	1.34

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 regulatedICAO/IATA Not regulatedIMDG/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	Complies

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 not 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
Photoinitiator	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
Ethylene oxide	10 lb	10 lb	RQ 10 lb final RQ

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			RQ 4.54 kg final RQ
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US State Regulations**California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

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
Ethylene oxide	X	X	X

16. OTHER INFORMATION**Prepared By**

EHS Department

Revision Date

2018-01-05

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.

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