Safety Data Sheet

according to HazCom 2012

SDS # : 55401

55401

Issue Date 2020-09-21 **Revision Date** 2020-09-21 **Version** 1.02

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

Product identifier

Product Name 55401

Other means of identification

Product Code 55401

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 light yellow
Appearance transparent

Classification

Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Target Organ Effects

Respiratory system.

GHS Label elements, including precautionary statements

Signal word Danger

Hazard statements
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements - Prevention
Do not handle until all safety precautions have been read and understood
Wear protective gloves
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
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.

Other Information
Unknown acute toxicity
0 % of the mixture consists of ingredient(s) of unknown toxicity.

Testing for acute and chronic aquatic effects determined no environmental classification is required.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret	Classification (Reg. 1272/2008)
1-vinyl-2-pyrrolidone	Proprietary	25-39	*	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) STOT SE 3 (H335) STOT RE 2 (H373) Eye Dam. 1 (H318) Carc. 2 (H351)
Photoinitiator	Proprietary	1-<3	*	Acute Tox. 4 (H302) Aquatic Chronic 2 (H411)
Visible photoinitiator	Proprietary	<1	*	Skin Sens. 1A (H317) Aquatic Chronic 4 (H413)

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
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Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1-vinyl-2-pyrrolidone (25-39 %)	TWA: 0.05 ppm	-	-

ACGIH (American Conference of Governmental Industrial Hygienists)
TLV - Threshold Limit Value

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

Hand Protection
Nitrile rubber, (NBR: 6mm), Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Respiratory protection

Ensure adequate ventilation, A NIOSH-approved respirator with a minimum APF of 50, or 1000 if spray applied, in accordance with 29 CFR 1910.134, 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, Contaminated work clothing should not be allowed out of the workplace, 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		
Appearance	transparent	**Odor**	Characteristic
Color	light yellow	**Odor threshold**	No information available

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	150 cP	
Kinematic viscosity		
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

Serious eye damage/eye irritation Risk of serious damage to eyes.

Sensitization May cause sensitization of susceptible persons.

Mutagenic effects No information available.

Reproductive toxicity No information available.

Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
1-vinyl-2-pyrrolidone	A3	-		

Legend
ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen

Other Information

Developmental Toxicity No information available.

STOT - single exposure
STOT - repeated exposure
Target Organ Effects Respiratory system.

Aspiration hazard No information available.

Other adverse effects No information available.

Chronic toxicity 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) 3574 mg/kg
ATEmix (dermal) 3721 mg/kg
ATEmix (inhalation-dust/mist) 11 mg/l

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
1-vinyl-2-pyrrolidone	830 mg/kg (Rat)	1040 mg/kg (Rat)	3.07 mg/L (Rat) 4 h
Photoinitiator	> 1700 mg/kg (Rat)	6929 mg/kg (Rat)	
Visible photoinitiator	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Acute aquatic toxicity

Product Information
Testing for acute and chronic aquatic effects determined no environmental classification is required.

Component Information

Chemical Name	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to algae
1-vinyl-2-pyrrolidone	LC50 976 mg/L 96 h (Oncorhynchus mykiss)	45: 48 h Daphnia species mg/L EC50	EC50 >1000 mg/L 72 h (Scenedesmus subspicatus)
Photoinitiator	LC50 160 mg/l 48 h (Leuciscus idus)	EC50 > 119 48 H (Daphnia magna)	EC50 195 mg/l 72 h (green algae)
Visible photoinitiator	LC50: semi-static 90µg/L 96h (Danio rerio)	-	-

Persistence and degradability No information available.

Bioaccumulation
Component Information

Chemical Name	log Pow
1-vinyl-2-pyrrolidone	0.4

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	Complies
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 chemical is considered hazardous by the 2012 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 %
Photoinitiator	1.0

SARA 311/312 Hazard Categories

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

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

U.S. State Right-to-Know Regulations

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Chemical Name	New Jersey	Massachusetts	Pennsylvania
1-vinyl-2-pyrrolidone (25-39 %)	X		
2-Pyrrolidone 616-45-5 (<0.1 %)		X	X
Stabilizer (<0.1 %)	X	X	X

California Proposition 65
This product does not contain any Proposition 65 chemicals

Additional information
None

16. OTHER INFORMATION

Prepared By EHS Department
Revision Date 2020-09-21

Revision Note No information available

Disclaimer

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