according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 11.18.2016

CHEMCURE® 310 440LB DRM

1 Identification of the substance/mixture and of the company/undertaking



1.1 Product identifier

Material Name: CHEMCURE® 310 440LB DRM

Product code: 100084090

1.2 Relevant identified uses of the substance or mixture and uses advised against: Epoxy curing

agent

1.3 Details of the manufacturer/supplier of the safety data sheet

Manufacturer:

Cargill, Incorporated
Cargill Industrial Specialties
13400 15th Avenue North
Plymouth, MN 55441
1-800-842-3631, 1-952-984-9122
CIS_CustomerService@Cargill.com

Emergency telephone number:

ChemTel Inc

North America: 1-800-255-3924 International: 01-813-248-0585

2 Hazards identification

2.1 Classification of the substance or mixture:

In compliance with EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments.

Acute toxicity (oral), category 4.

Skin corrosion, category 1B.

Serious eye damage, category 1.

Skin sensitization, category 1.

Acute aquatic hazard, category 3.

Chronic aquatic hazard, category 3.

Hazard-determining components of labeling:

Benzyl Alcohol

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-

Salicylic acid

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol A diglycidyl ether homopolymer

2.2 Label elements

Hazard pictograms:





Signal word: Danger

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Hazard statements:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H402 Harmful to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

P302+P352 If on skin: Wash with soap and water.

P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see supplemental first aid instructions on this label).

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents and container as instructed in Section 13.

2.3 Other hazards: None known

Information concerning particular hazards for humans and environment:

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

3 Composition/information on ingredients

3.1 Chemical characterization: Mixture.

3.2 Description: None

3.3 Hazardous components (percentages by weight)

Identification	Name	Classification	Wt. %
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CAS number: 2855-13-2	Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Sens. 1; H317 Skin Corr. 1B; H314 Aquatic Chronic 3; H412	35-40
CAS number: 69-72-7	Salicylic acid	Acute Tox. 4; H302 Eye Dam. 1; H318	<2
CAS number: 100-51-6	Benzyl Alcohol	Acute Tox. 4; H302 Acute Tox. 4; H332	35-45
CAS number: 68609-08-5	Cyclohexanemethanamine, 5-amino-1,3,3- trimethyl-, reaction products with bisphenol A diglycidyl ether homopolymer	Skin Sens. 1; H317 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Acute 2; H401 Aquatic Chronic 2; H411	15-40

3.4 Additional information: None.

4 First aid measures

4.1 Description of first aid measures

General information:

First responders should wear gloves and other self-protection when performing treatment.

After inhalation:

Immediately call a POISON CONTROL CENTER or seek medical attention.

Take precautions to ensure your own safety.

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If breathing has stopped, trained personnel should begin rescue breathing.

Avoid mouth-to-mouth contact by using a barrier device.

If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR).

After skin contact:

Immediately call a POISON CONTROL CENTER or seek medical attention.

Avoid direct contact and wear chemical protective clothing, if necessary.

Immediately take off all contaminated clothing.

Wash with plenty of water / soap and rinse thoroughly until medical aid is available.

Gently blot or brush away excess product.

Wash contaminated clothing before re-use or discard.

After eye contact:

Get medical advice/attention.

Avoid direct contact and wear chemical protective gloves, if necessary.

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

After swallowing:

Immediately call a POISON CONTROL CENTER or seek medical attention.

Rinse mouth and do not induce vomiting.

If breathing has stopped, trained personnel should begin rescue breathing.

Avoid mouth-to-mouth contact by using supplied air / barrier device.

If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR).

4.2 Most important symptoms and effects, both acute and delayed:

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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Harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed:

No additional information.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing media:

Do not use water stream, as this may spread fire.

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

Protective equipment:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

5.4 Additional information: None

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear recommended personal protective equipment.

Ensure adequate ventilation.

Ensure air handling systems are operational.

6.2 Environmental precautions:

Should not be released into the environment.

Prevent from reaching drains, sewer or waterway.

6.3 Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing.

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders).

Dispose of contents / container in accordance with local regulations.

6.4 Reference to other sections: None

7 Handling and storage

7.1 Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8).

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Wash thoroughly after handling.

Do not swallow.

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Do not get in eyes, on skin, or on clothing.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

Protect from freezing and physical damage.

Keep container tightly sealed.

Hold bulk storage under a nitrogen blanket.

7.3 Specific end use(s): No additional information.

8 Exposure controls/personal protection

8.1 Control parameters:

100-51-6, Benzyl Alcohol, WEEL TWA 10.0 ppm.

8.2 Exposure controls

Appropriate engineering controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Respiratory protection:

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

If there are no applicable exposure limit requirements or guidelines, use a NIOSH-approved respirator.

Protection of skin:

Select glove material impermeable and resistant to the substance.

Suitable gloves can be recommended by the glove supplier.

Eye protection:

Wear chemical splash googles and face shield when eye and face contact is possible due to splashing or spraying of material.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

Wash contaminated clothing before reusing.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance (physical state, color):		Explosion limit lower: Explosion limit upper:	1.3% 13%
Odor:	Ammonia-like	Vapor pressure:	Not determined or not available.
Odor threshold:	Not determined or not available.	Vapor density:	Not determined or not available.
pH-value:	Not determined or not available.	Relative density:	Not determined or not available.

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Melting/Freezing point:	Not determined or not available.	Solubilities:	Fully miscible.
Boiling point/range:	I > 705°((> 7001°E)	Partition coefficient (noctanol/water):	Not determined or not available.
Flash point (closed cup):	96°C (203°F)	Auto/Self-ignition temperature:	Product is not self-igniting
Evaporation rate:		Decomposition temperature:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.	Dynamic viscosity:	Not determined or not available.
Density:	1 g/cm³	Kinematic viscosity:	Not determined or not available.

10 Stability and reactivity

- **10.1 Reactivity:** Does not react under normal conditions of use and storage.
- **10.2** Chemical stability: Stable under normal conditions of use and storage.
- **10.3 Possibility of hazardous reactions:** None under normal conditions of use and storage.
- 10.4 Conditions to avoid: None known.

10.5 Incompatible materials:

Strong oxidizing agents. Strong acids. Strong alkali.

Peroxides and other radical forming substances.

10.6 Hazardous decomposition products:

Carbon monoxide, carbon dioxide, and Nitrogen oxides.

11 Toxicological information

11.1 Information on toxicological effects:

Routes of exposure: No information available.

Acute toxicity:

Oral:

Benzyl Alcohol: LD50 - Rat - 1,230 mg/kg.

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-: LD50 - Rat - 1,030 mg/kg.

Salicylic acid: LD50 Oral - Rat - male - 891 mg/kg.

Inhalation:

Benzyl Alcohol: LD50 - Rat - $> 4,178 \text{ mg/m}^3$.

Skin corrosion/irritation:

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-: Corrosive to the skin.

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol A diglycidyl ether homopolymer: Irritating to the skin.

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Serious eye damage/irritation:

Salicylic acid: Causes serious eye damage.

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol A diglycidyl ether homopolymer: Irritating effect on the eyes.

Respiratory or skin sensitization:

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-: Sensitization possible through skin contact. Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol A diglycidyl ether homopolymer: Sensitization possible through skin contact.

Carcinogenicity:

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

NTP (National Toxicology Program): None of the ingredients are listed.

Germ cell mutagenicity: No additional information. **Reproductive Toxicity:** No additional information.

STOT-single and repeated exposure: No additional information.

Aspiration toxicity: No information available.

Additional toxicological information:

No additional information.

12 Ecological information

12.1 Toxicity:

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-: Aquatic invertebrates, LC50 - Daphnia magna (Water flea) - 17.4 mg/L.

12.2 Persistence and degradability:

No additional information.

12.3 Bioaccumulative potential:

No additional information.

12.4 Mobility in soil:

No additional information.

General notes:

No additional information.

12.5 Results of PBT and vPvB assessment:

PBT: No additional information. **vPvB:** No additional information.

12.6 Other adverse effects:

No additional information.

13 Disposal considerations

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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13.1 Waste treatment methods

Relevant information:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory agencies.

14 Transport information

Land transport:

DOT (49 CFR) transport

14.1	UN Number:	2735
14.2	UN Proper shipping name:	Amines, Liquid, Corrosive, N.O.S. (Isophorone Diamine)
14.3	UN Transport hazard classes:	8
14.4	Packing group:	III
	Danger label:	8 Corrosive substances
14.5	Environmental hazards:	No
14.6	Special precautions for user:	
	None	
	Limited quantity:	
	5L	

ADR/RID

Limited quantity:

14.1	UN Number:	2735
14.2	UN Proper shipping name:	Amines, Liquid, Corrosive, N.O.S. (Isophorone Diamine)
14.3	UN Transport hazard classes:	8
14.4	Packing group:	III
	Danger label:	8 Corrosive substances
	-	
	Tunnel restriction code:	E
	Transport category:	3
	Hazard ID number:	80
14.5	Environmental hazards:	No
14.6	Special precautions for user:	
	None	

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5L

Quantity exception:

30mL inner pckg; 1L outer pckg

Air transport:

IATA-DGR

UN Number:	2735
UN Proper shipping name:	Amines, Liquid, Corrosive, N.O.S. (Isophorone Diamine)
UN Transport hazard classes:	8
Packing group:	III
Danger label:	8 Corrosive substances
Environmental hazards:	No
Special precautions for user:	
None	
Limited quantity:	
1L	
Quantity exception:	
•	
	UN Proper shipping name: UN Transport hazard classes: Packing group: Danger label: Environmental hazards: Special precautions for user: None Limited quantity:

Sea transport:

IMDG

14.1	UN Number:	2735
14.2	UN Proper shipping name:	Amines, Liquid, Corrosive, N.O.S. (Isophorone Diamine)
14.3	UN Transport hazard classes:	8
14.4	Packing group:	III
	Danger label:	8 Corrosive substances
	EMS code:	F-A, S-B
14.5	Environmental hazards:	No
14.6	Special precautions for user:	
	None	
	Limited quantity:	
	5L	
	Quantity exception:	

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14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

North American

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 302 (Extremely hazardous substances):

SARA Section 313 (Specific toxic chemical listings):

TSCA (Toxic Substances Control Act):

All ingredients are listed.

TSCA Rules and Orders: Not applicable.

Proposition 65 (California):

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

108-88-3 Toluene.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

European Union

REACH Article 57 (SVHC): None of the ingredients are listed.

Germany MAK: Not classified.

Australia

Australian Inventory of Chemical Substances (AICS):

All ingredients are listed.

China

Inventory of Existing Chemical Substances in China (IECSC):

All ingredients are listed.

Japan

Inventory of Existing and New Chemical Substances (ENCS):

One or more ingredients are not listed.

Korea

Existing Chemicals List (ECL):

All ingredients are listed.

New Zealand

New Zealand Inventory of Chemicals (NZOIC):

All ingredients are listed.

Philippines

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Philippine Inventory of Chemicals and Chemical Substances (PICCS):

All ingredients are listed.

Taiwan

Taiwan Chemical Substance Inventory (TSCI):

All ingredients are listed.

16 Other information

Abbreviations and Acronyms: None

Manufacturer Statement:

This product has been classified in accordance within GHS guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-1-0

HMIS: 3-1-0