



## SAFETY DATA SHEET

SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/06/2020

**CLEAN AMINE**  
SUPERSEDES: 06/12/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Product identifier

**Product Name** CLEAN AMINE

#### Other means of identification

**Product Code** PST-00104  
**UN/ID no** 3082  
**Synonyms** None  
**Registration Number(s)** 34704-120

#### Recommended use of the chemical and restrictions on use

**Recommended Use** Herbicide.  
**Uses advised against** No information available

#### Details of the supplier of the safety data sheet

**Manufacturer Address**  
LOVELAND PRODUCTS, INC.  
P.O. Box 1286  
Greeley, CO 80632-1286

#### Emergency telephone number

**Company Phone Number** 1-888-LPI-CUST (574-2878)  
**Emergency Telephone** Chemtrec 1-800-424-9300  
Medical Emergencies: 1-866-944-8565  
US regulations require reporting spills of this material that could reach any surface waters.  
The toll-free phone number for the US Coast Guard National Response Center is  
1-800-424-8802

### 2. HAZARDS IDENTIFICATION

#### Classification

#### **OSHA Regulatory Status**

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

Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 1 Sub-category B - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)
Carcinogenicity	Category 2 - (H351)
Specific target organ toxicity (single exposure)	Category 3 - (H335)

#### Label elements



**Signal word**

**DANGER**

**Hazard statements**

H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H317 - May cause an allergic skin reaction



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H335 - May cause respiratory irritation  
H351 - Suspected of causing cancer

### Precautionary Statements - Prevention

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P281 - Use personal protective equipment as required  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P280 - Wear protective gloves  
P271 - Use only outdoors or in a well-ventilated area

### Precautionary Statements - Response

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor/physician  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell  
P330 - Rinse mouth  
P331 - Do NOT induce vomiting  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
P363 - Wash contaminated clothing before reuse

### Precautionary Statements - Storage

P405 - Store locked up  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

### Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

Not applicable



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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture

Chemical Name	CAS No	Weight-%	GHS Classification	Trade Secret
2,4-D	94-75-7	30 - 60	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Skin Sens. 1 (H317) STOT SE 3 (H335) Aquatic Chronic 3 (H412)	*
DIMETHYLAMINE, ANHYDROUS	124-40-3	7 - 13	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335) Flam. Gas 1 (H220) Press. Gas	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.  
OSHA Hazard Communication 29 CFR 1910.1200

### 4. FIRST AID MEASURES

#### Description of first aid measures

<b>General advice</b>	Get medical attention if symptoms occur.
<b>Eye contact</b>	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>Skin contact</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	Remove to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
<b>Ingestion</b>	Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

#### Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

#### Indication of any immediate medical attention and special treatment needed

**Treatment:** Treat symptomatically. Symptoms may be delayed. Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call 1-866-944-8565 for emergency medical treatment information.

**Note to physicians** No specific antidote. Treat symptomatically.

**Antidotes** No data available



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### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire, Use CO<sub>2</sub>, dry chemical, or foam

#### Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

#### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

#### Protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

##### **Personal precautions**

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### Environmental precautions

##### **Environmental precautions**

Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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**

Take up mechanically, placing in appropriate containers for disposal. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

##### **Advice on safe handling**

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

#### Conditions for safe storage, including any incompatibilities

##### **Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

##### **Incompatible materials**

Incompatible with strong acids and bases. Incompatible with oxidizing agents.



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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### Exposure Guidelines

#### Appropriate engineering controls

#### Engineering Controls

Showers  
Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Tight sealing safety goggles. Face protection shield.

#### Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

#### Respiratory protection

Dependent on job function. If vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved air-purifying respirator with any cartridges/filters approved for pesticides. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection Standard. Wear a supplied air respirator if exposure concentrations are unknown.

#### General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.



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**9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear liquid
<b>Color</b>	Amber or Black
<b>Odor</b>	Fishy Amine
<b>Odor threshold</b>	No data available

<u>Property</u>	<u>Values (Remarks - Method)</u>	
<b>pH</b>	6.6 (Neat)	
<b>Melting point / freezing point</b>	No data available	No data available
<b>Boiling point</b>	No data available	No data available
<b>Flash point</b>	Does not flash	
<b>Evaporation rate</b>	No data available	
<b>Flammability (solid, gas)</b>	No data available	Not applicable
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No data available	
<b>Lower flammability limit:</b>	No data available	
<b>Vapor pressure</b>	0.0041 mmHg	
<b>Vapor density</b>	No data available	
<b>Specific Gravity</b>	1.158 g/ml	
<b>Water solubility</b>	Miscible in water	Miscible
<b>Solubility in other solvents</b>	No data available	
<b>Partition coefficient</b>	No data available	No data available
<b>Autoignition temperature</b>	No data available	No data available
<b>Decomposition temperature</b>	No data available	No data available
<b>Kinematic viscosity</b>	No data available	
<b>Dynamic viscosity</b>	No data available	
<b>Explosive properties</b>	No data available	
<b>Oxidizing properties</b>	No data available	

Other Information

<b>VOC Content (%)</b>	No data available
<b>Density</b>	9.66lbs/gal

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.



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### 10. STABILITY AND REACTIVITY

#### **Reactivity**

No data available

#### **Chemical stability**

Stable under recommended storage conditions.

#### **Possibility of Hazardous Reactions**

None under normal processing.

#### **Conditions to avoid**

Exposure to air or moisture over prolonged periods.

#### **Incompatible materials**

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

#### **Hazardous Decomposition Products**

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



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**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity of the formulated product:**

Chemical Name	Oral LD <sub>50</sub>	Dermal LD <sub>50</sub>	Inhalation LC <sub>50</sub>
2,4-D	= 420 mg/kg ( Rat ) = 375 mg/kg ( Rat )	= 1500 mg/kg ( Rat )	
DIMETHYLAMINE, ANHYDROUS	= 698 mg/kg ( Rat )	= 3900 mg/kg ( Rat )	= 4540 ppm ( Rat ) 6 h

Chemical Name	Skin corrosion/irritation	Eye damage/irritation	Respiratory sensitization	Skin sensitization
2,4-D 94-75-7		Category 1		Category 1
DIMETHYLAMINE, ANHYDROUS 124-40-3	Category 2 Category 1	Category 1		

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

**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2,4-D 94-75-7	-	Group 2B	-	X

*IARC (International Agency for Research on Cancer)  
 Group 2B - Possibly Carcinogenic to Humans  
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
 X - Present*

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Chronic toxicity** Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects. May cause adverse liver effects.  
**Target Organ Effects** Central nervous system, Eye damage/irritation, kidney, liver, Respiratory system, Skin.  
**Aspiration hazard** No information available.

**Information on likely routes of exposure**

**Product Information** No data available  
**Inhalation** No data available.  
**Eye contact** No data available.  
**Skin contact** No data available.  
**Ingestion** No data available.





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**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2,4-D 94-75-7	EC50 20 - 52 mg/L 120 h Pseudokirchneriella subcapitata EC50 23.7 - 24.7 mg/L 96 h Pseudokirchneriella subcapitata	LC50 20 mg/L 96 h Cyprinus carpio LC50 127.9 - 141.7 mg/L 96 h Cyprinus carpio LC50 180 mg/L 96 h Lepomis macrochirus LC50 77 - 157 mg/L 96 h Oncorhynchus mykiss LC50 2450 - 3160 mg/L 96 h Oryzias latipes LC50 103 - 171 mg/L 96 h Pimephales promelas LC50 165 mg/L 96 h Pimephales promelas LC50 70.7 mg/L 96 h Poecilia reticulata LC50 6.3 - 11.0 mg/L 96 h Poecilia reticulata	EC50 17.6 - 32.6 mg/L 48 h Daphnia magna EC50 417.8 mg/L 72 h Daphnia magna
DIMETHYLAMINE, ANHYDROUS 124-40-3	EC50 9 mg/L 96 h Pseudokirchneriella subcapitata	LC50 111 - 125 mg/L 96 h Oncorhynchus mykiss LC50 120 mg/L 96 h Oncorhynchus mykiss LC50 210 mg/L 96 h Poecilia reticulata LC50 127 - 349 mg/L 96 h Poecilia reticulata LC50 396 mg/L 96 h Brachydanio rerio	EC50 88.7 mg/L 48 h Daphnia magna Straus

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes**

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at <http://www.acrecycle.org/>. Do not contaminate water, food or feed by storage or disposal.

**Contaminated packaging**

Do not reuse container.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
2,4-D 94-75-7	U240	Included in waste stream: F039	10.0 mg/L regulatory level	U240
DIMETHYLAMINE, ANHYDROUS 124-40-3	-	-	-	U092

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
2,4-D 94-75-7	Category IV - Phenoxycetic Acid Herbicides	-	-	-



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**14. TRANSPORT INFORMATION**

**Note:** LESS THAN 27 GALLONS: NOT REGULATED

**DOT**

<b>UN/ID no</b>	3082
<b>Proper shipping name</b>	GREATER THAN 27 GALLONS: RQ UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S., (2,4-D)
<b>U.S. Surface Freight Classification:</b>	COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS: 60)
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Emergency Response Guide Number</b>	171



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**15. REGULATORY INFORMATION**

<b>NFPA</b>	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties - Personal protection X	
<b>HMIS</b>	Health hazards 3	Flammability 0	Physical hazards 0		
	0 - Least	1 - Slight	2 - Moderate	3 - High	4 - Severe

**US Federal Regulations**

**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 %
2,4-D - 94-75-7	0.1
DIMETHYLAMINE, ANHYDROUS - 124-40-3	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

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
2,4-D 94-75-7	100 lb	-	-	X
DIMETHYLAMINE, ANHYDROUS 124-40-3	1000 lb	-	-	X

**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)
2,4-D 94-75-7	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
DIMETHYLAMINE, ANHYDROUS 124-40-3	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**US EPA Waste Number** U092 U240

**U.S. EPA Label Information**

**EPA Registration Number** 34704-120

**EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER



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### Difference between SDS and EPA Pesticide label

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing.

## 16. OTHER INFORMATION

**Prepared By** Product Stewardship and Regulatory Affairs

**Reviewed By** Safety, Health and Environment

**Issue Date** 05/06/2020

**Revision Date** 05/06/2020

**Revision Note**

All SDS sections updated

**CLEAN AMINE** is a registered trademark of Loveland Products, Inc.

**Disclaimer**

This safety data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.

**End of Safety Data Sheet**