



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



SAFETY DATA SHEET

CLEAN AMINE
SUPERSEDES: 06/12/2017

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



SAFETY DATA SHEET

CLEAN AMINE

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

SUPERSEDES: 06/12/2017

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

- General advice** Get medical attention if symptoms occur.
- Eye contact** 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.
- Skin contact** 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.
- Inhalation** 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.
- Ingestion** 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.
- Self-protection of the first aider** 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



SAFETY DATA SHEET

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

CLEAN AMINE

SUPERSEDES: 06/12/2017

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire, Use CO₂, 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.



SAFETY DATA SHEET

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

CLEAN AMINE

SUPERSEDES: 06/12/2017

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.



SAFETY DATA SHEET

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

CLEAN AMINE

SUPERSEDES: 06/12/2017

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

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

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

Other Information

VOC Content (%)	No data available
Density	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.



SAFETY DATA SHEET

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

CLEAN AMINE

SUPERSEDES: 06/12/2017

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.



SAFETY DATA SHEET

CLEAN AMINE

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

SUPERSEDES: 06/12/2017

11. TOXICOLOGICAL INFORMATION

Acute toxicity of the formulated product:

Chemical Name	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
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.



SAFETY DATA SHEET

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

CLEAN AMINE
SUPERSEDES: 06/12/2017

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	-	-	-



SAFETY DATA SHEET

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

CLEAN AMINE

SUPERSEDES: 06/12/2017

14. TRANSPORT INFORMATION

Note: LESS THAN 27 GALLONS: NOT REGULATED

DOT

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



SAFETY DATA SHEET

CLEAN AMINE

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

SUPERSEDES: 06/12/2017

15. REGULATORY INFORMATION

NFPA	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties - Personal protection X	
HMIS	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



SAFETY DATA SHEET

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

CLEAN AMINE

SUPERSEDES: 06/12/2017

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