

SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020

SABER HERBICIDE SUPERSEDES: 12/03/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier Product Name	SABER HERBICIDE	
<u>Other means of identification</u> Product Code UN/ID no Synonyms Registration Number(s)	PST-00112 UN3082 None 34704-803	
Recommended use of the chemical Recommended Use Uses advised against	and restrictions on use Broadleaf Weed Control. Herbicide. No information available	
Details of the supplier of the safety Manufacturer Address LOVELAND PRODUCTS, INC. P.O. Box 1286 Greeley, CO 80632-1286	data sheet	
Emergency telephone number Company Phone Number Emergency Telephone	1-888-LPI-CUST (574-2878) 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		

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)
Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Vapors)	Category 3 - (H331)
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

H314 - Causes severe skin burns and eye damage



	Y DATA SHEET SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020 H317 - May cause an allergic skin reaction H331 - Toxic if inhaled H335 - May cause respiratory irritation H351 - Suspected of causing cancer	SABER HERBICIDE SUPERSEDES: 12/03/2015
Precautionary Statements - Prevention	 P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been re P281 - Use personal protective equipment as required P264 - Wash face, hands and any exposed skin thoroughly af P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P260 - Do not breathe dust/fume/gas/mist/vapors/spray P272 - Contaminated work clothing should not be allowed out P280 - Wear protective gloves 	ter handling
Precautionary Statements - Response	 P301 + P312 - IF SWALLOWED: Call a POISON CENTER or unwell P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off clothing. Rinse skin with water/shower P304 + P340 - IF INHALED: Remove victim to fresh air and ke comfortable for breathing P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water Remove contact lenses, if present and easy to do. Continue ri P310 - Immediately call a POISON CENTER or doctor/physicia P330 - Rinse mouth P331 - Do NOT induce vomiting P333 + P313 - If skin irritation or rash occurs: Get medical adv P363 - Wash contaminated clothing before reuse 	f immediately all contaminated eep at rest in a position er for several minutes. nsing ian
Precautionary Statements - Storage	P405 - Store locked up P403 + P233 - Store in a well-ventilated place. Keep containe	r tightly closed
Precautionary Statements - Disposal	P501 - Dispose of contents/ container to an approved waste d	lisposal plant
Hazards not otherwise classified (I	HNOC)	

Not applicable



SAFETY DATA SHEET SA SA SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020 SL 3. COMPOSITION/INFORMATION ON INGREDIENTS

SABER HERBICIDE

SUPERSEDES: 12/03/2015

Mixture

Chemical Name	CAS No	Weight-%	GHS Classification	Trade Secret
2,4-D	94-75-7	15 - 40	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	10 - 30	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335) Flam. Gas 1 (H220) Press. Gas	*
Ethylene glycol	107-21-1	7 - 13	Acute Tox. 4 (H302)	*

*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 effe	cts, both acute and delayed
Symptoms	No information available.
Indication of any immediate medica	al 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



SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020

SABER HERBICIDE SUPERSEDES: 12/03/2015

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 containm	ent 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. Clean contaminated surface thoroughly. Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Soak up with inert absorbent material. After cleaning, flush away traces with water. Pick up and transfer to properly labeled containers.



SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020 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. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.
Conditions for safe storage, includ	ing 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.
8. EX	POSURE CONTROLS/PERSONAL PROTECTION
Control parameters	
Exposure Guidelines	

Appropriate engineering controls

	Chauser
Engineering Controls	Showers Eyewash stations Ventilation systems.
Individual protection measures, su	ch 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.



SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020 9. PHYSICAL AND CHEMICAL PROPERTIES SABER HERBICIDE SUPERSEDES: 12/03/2015

Information on basic physical and chemical properties

Physical state Appearance Color Odor Odor threshold	Liquid Clear liquid Dark brown Fishy Amine-like No data available
Property pHMelting point / freezing pointBoiling pointFlash pointEvaporation rateFlammability (solid, gas)Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density Specific Gravity Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosityDynamic viscosity Explosive properties Oxidizing properties	Values (Remarks - Method) 8.7No data available No data available> 100 °C / > 212 °F No data available No data availableNo data available No data availableNo data available 9.0 mmHg No data availableNo data available 9.0 mmHg No data availableNo data available 9.0 mmHg No data available 1.176 g/ml Emulsifies No data available No data available
Other Information	
VOC Content (%) Density	No data available 9.8lbs/gal
Note: These physical data are typical	values based on material tested but may vary from

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.



SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020 **10. STABILITY AND REACTIVITY**

SABER HERBICIDE SUPERSEDES: 12/03/2015

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.

<u>Hazardous Decomposition Products</u> Thermal decomposition can lead to release of irritating and toxic gases and vapors.



SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020

SABER HERBICIDE SUPERSEDES: 12/03/2015

11. TOXICOLOGICAL INFORMATION

toxicity (of the	formulated	product:	

Oral LD ₅₀	> 2,000 mg/kg (rat)	
Dermal LD ₅₀	1,098 mg/kg (female rat)	
Inhalation (Vapors) LC50	> 2.06 mg/l (rat, 4-hr)	
Skin corrosion/irritation	Moderately irritating to the	skin.
Sensitization	Not a skin sensitizer.	
Chemical Name	Oral LD50	Dermal L

Chemical Name	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC50
2,4-D	= 420 mg/kg (Rat) = 375 mg/kg (= 1500 mg/kg (Rat)	
	Rat)		
DIMETHYLAMINE, ANHYDROUS	= 698 mg/kg (Rat)	= 3900 mg/kg (Rat)	= 4540 ppm (Rat)6 h
Ethylene glycol	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat)= 9530 µL/kg	
	, , , , , , , , , , , , , , , , , , ,	(Rabbit)	

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

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

Germ cell mutagenicity Carcinogenicity

No information available.

information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

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

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
STOT - single exposure	No
STOT - repeated exposure	No
Chronic toxicity	Ch

information available. information available. ronic 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. Central nervous system, Eye damage/irritation, kidney, liver, Respiratory system, Skin. No information available.

Target Organ Effects Aspiration hazard

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	No data available.
Skin contact	Moderately irritating.
Ingestion	No data available.



SAFETY DATA SHEET SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020 **12. ECOLOGICAL INFORMATION**

SABER HERBICIDE

SUPERSEDES: 12/03/2015

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2,4-D	EC50 20 - 52 mg/L 120 h	LC50 20 mg/L 96 h Cyprinus carpio	EC50 17.6 - 32.6 mg/L 48 h
94-75-7	Pseudokirchneriella subcapitata	LC50 127.9 - 141.7 mg/L 96 h	Daphnia magna EC50 417.8 mg/L
	EC50 23.7 - 24.7 mg/L 96 h	Cyprinus carpio LC50 180 mg/L 96	72 h Daphnia magna
	Pseudokirchneriella subcapitata	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	
DIMETHYLAMINE, ANHYDROUS	EC50 9 mg/L 96 h	LC50 111 - 125 mg/L 96 h	EC50 88.7 mg/L 48 h Daphnia
124-40-3	Pseudokirchneriella subcapitata	Oncorhynchus mykiss LC50 120	magna Straus
		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	
Ethylene glycol	EC50 6500 - 13000 mg/L 96 h	LC50 41000 mg/L 96 h	EC50 46300 mg/L 48 h Daphnia
107-21-1	Pseudokirchneriella subcapitata	Oncorhynchus mykiss LC50 14 - 18	magna
		mL/L 96 h Oncorhynchus mykiss	
		LC50 27540 mg/L 96 h Lepomis	
		macrochirus LC50 40761 mg/L 96 h	
		Oncorhynchus mykiss LC50 40000 -	
		60000 mg/L 96 h Pimephales	
		promelas LC50 16000 mg/L 96 h	
		Poecilia reticulata	

Persistence and degradability No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available



SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020 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	U240	Included in waste stream: 10.0 mg/L regulatory level		U240
94-75-7		F039		
DIMETHYLAMINE,	-	-	-	U092
ANHYDROUS				
124-40-3				

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 - Phenoxyacetic Acid Herbicides	-	-	-

14. TRANSPORT INFORMATION

Note:

LESS THAN 22 GALLONS: NOT REGULATED

DOT	
UN/ID no	UN3082
Proper shipping name	22 gallons and greater: 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
Reportable Quantity (RQ)	Acetic acid, 2,4-dichlorophenoxy-: RQ kg= 113.81,
	Dimethylamine: RQ kg= 3362.96, Ethylene glycol: RQ kg= 22700.00
Special Provisions	8, 146, 173, 335, IB3, T4, TP1, TP29
Emergency Response Guide Number	171



	SAF	ETY DATA S SDS REVISIO		DATE OF ISSUE: 05/08	SABER HEF	
		15. R	EGULATORY I	NFORMATION		
<u>NFPA</u>	Health	hazards 4	Flammability 1	Instability 0	Physical and Properties -	Chemical
HMIS	Health	hazards 3	Flammability 1	Physical haza		ection X
	0 - Lea	ast 1-S	light 2 - Mo	oderate 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
Ethylene glycol - 107-21-1	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	-	-	Х
DIMETHYLAMINE, ANHYDROUS 124-40-3	1000 lb	-	-	Х

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	100 lb	-	RQ 100 lb final RQ
94-75-7			RQ 45.4 kg final RQ
DIMETHYLAMINE, ANHYDROUS	1000 lb	-	RQ 1000 lb final RQ
124-40-3			RQ 454 kg final RQ
Ethylene glycol	5000 lb	-	RQ 5000 lb final RQ
107-21-1			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name		California Proposition 65
Ethylene glycol - 107-21-1		Developmental
US EPA Waste Number	U092 U240	

U.S. EPA Label Information **EPA Registration Number** 34704-803 **EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling



SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 05/08/2020

SABER HERBICIDE SUPERSEDES: 12/03/2015

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

Difference between SDS and EPA Pesticide label

Corrosive, causes irreversible eye damage. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist.

16. OTHER INFORMATION

Prepared By Product Stewardship and Regulatory Affairs

Reviewed By Safety, Health and Environment

Issue Date05/08/2020Revision Date05/08/2020Revision Note05/08/2020All SDS sections updated

SABER HERBICIDE 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