SDS NUMBER: 000890-15-LPI SDS REVISIONS: FORMAT DATE OF ISSUE: 01/16/15

KLEENUP® PRO SUPERSEDES: 08/28/13

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 PRODUCT IDENTIFIER:

TRADE NAME: KLEENUP® PRO
1.2 RECOMMENDED USE: GROUP 9 HERBICIDE

1.3 SUPPLIER DETAILS:

LOVELAND PRODUCTS, INC.

P.O. Box 1286 • Greeley, CO 80632-1286

1.4 24 Hour Emergency Phone: 1-800-424-9300 - Medical Emergencies: 1-866-944-8565

U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR 1910.1200

Eye IrritationCategory 2BH320Skin irritationCategory 4H312

2.2 Label elements



Signal word: WARNING

Hazard Statement: H320 – Causes eye irritation.

H312 – Harmful in contact with skin.

Precautionary

Statement: P262 – Do not get in eyes, on skin, or on clothing.

P264 - Wash thoroughly after handling.

(Prevention): P271 – Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

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

P102 - Keep out of reach of children.

Precautionary

Statement: P305+P351+P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and

easy to do - continue rinsing.

(Response): P101 – If medical advice is needed, have the product container or label at hand.

P363 – Wash contaminated clothing before reuse.

P391 – Collect spillage.

Precautionary Statement:

(Storage): P402+P234 – Store above 10°F (-12°C) to keep product from crystallizing. Keep only in original container.

P405 - Store locked up.

2.3 Other hazards

None known

KEEP OUT OF REACH OF CHILDREN -

Appearance and odor: Clear, viscous yellow liquid with amine odor.

Potential Health effects

Routes of exposure Eye contact.

Eyes Causes moderate eye irritation. Skin Harmful in contact with skin.

InhalationNo data available.IngestionNo data available.

Target organs Eyes.

Signs and symptoms Causes moderate eye irritation.

Potential environmental effects This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effect on the environment.

PAGE 1 OF 6

SDS NUMBER: 000890-15-LPI SDS REVISIONS: FORMAT

DATE OF ISSUE: 01/16/15

KLEENUP® PRO SUPERSEDES: 08/28/13

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Classification according to 29 CFR 1910.1200

Chemical Name: CAS No. Classification Concentration

[%] 41.00

Isopropylamine salt of Glyphosate Other ingredients

38641-94-0 n/a Eye Irrit. 2B; H320 Skin irrit. 4; H312

41.00 Balance

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

Eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5

minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Eyes: Causes moderate eye irritation.

4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat symptomatically. Symptoms may be delayed.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565
Take container, label or product name with you when seeking medical attention.

NOTES TO PHYSICIAN: Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO₂), alcohol foam, foam, water spray or fog. Do not use water jet as

this will spread the fire.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: During a fire, hazardous by-products can be released.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment 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.

SDS NUMBER: 000890-15-LPI SDS REVISIONS: FORMAT **DATE OF ISSUE: 01/16/15**

KLEENUP® PRO SUPERSEDES: 08/28/13

ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Personal Precautions:

Wear suitable protective clothing.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below

the mean high water mark. Do not contaminate water when disposing of equipment washwaters or

rinsate

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up: Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is

possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to

Remove residual contamination.

Never return spills to original containers for re-use.

HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Avoid inhalation of mists, vapors / spray and contact with eyes, skin and clothing. Do not breathe Advice on Safe Handling:

mists or vapor. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Use care in handling/storage. Wash before eating, drinking

and/or smoking.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers:

Store above 10°F (-12.2°C) to keep product from crystallizing. Crystals will settle to the bottom of the container. If allowed to crystallize, place in a warm room at 68°F (20°C) for several days to redissolve and roll or shake container or recirculate in mini-bulk or bulk containers to mix well before using. Do not contaminate water, foodstuffs, feed or seed by

storage or disposal.

EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (ACGIH) TLVs

Components Type Value

No data available.

U.S. Workplace Exposure Level (OSHA) PELs

Components **Type** Value

No data available.

Biological limit values

ACGIH Biological Exposure Indices

Components Value Specimen

No listings

8.2 EXPOSURE CONTROLS:

Engineering Measures

Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors and spray mists. Provide eyewash station and safety shower.

Individual Protection Measures:

Eye / Face Protection: Goggles or shielded safety glasses are recommended.

Skin Protection: Coveralls worn over long-sleeved shirt and long pants. Chemical-resistant gloves. Chemical-resistant footwear plus

socks.

Respiratory Protection: In case of inadequate ventilation or risk of inhalation of mists or vapors, use suitable respiratory equipment such as

MSHA/NIOSH TC-21C or NIOSH approved respirator with N. R. P or HE filter. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory

protection if exposure concentrations are unknown.

SDS NUMBER: 000890-15-LPI SDS REVISIONS: FORMAT DATE OF ISSUE: 01/16/15

KLEENUP® PRO SUPERSEDES: 08/28/13

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE: Clear viscous liquid

ODOR: Amine.

ODOR THRESHOLD: No data available.
COLOR: Yellow.
pH: 4.4 (1% solution)

MELTING POINT / FREEZING POINT: No data available BOILING POINT: No data available No data available PLASH POINT: Does not flash. FLAMMABILILITY (solid, gas): No data available.

UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available.

VAPOR PRESSURE: No data available.

SOLUBILITY: Soluble

PARTITION CO-EFFICIENT, n-OCTANOL / WATER: <3.2 @ 25°C (Glyphosate).

AUTO-IGNITION TEMPERATURE: No data available. DECOMPOSITION TEMPERATURE: No data available VISCOSITY: (kinematic): 22.42 cST @ 24°C SPECIFIC GRAVITY (Water = 1): 1.169 – 1.178 g/ml

BULK DENSITY: 9.75 – 9.83 lbs./gal / 1.04 kg/L

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.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No data available. Will not polymerize.

10.4 CONDITIONS TO AVOID

Use of galvanized or unlined steel.

10.5 INCOMPATIBILE MATERIALS

This product and its spray solutions will react with galvanized or unlined steel to produce hydrogen gas that may form a highly combustible gas mixture, which could flash or explode if ignited. Acids and bases.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Will emit toxic fumes as it burns.

11 TOXICOLOGICAL INFORMATION

11.3 LIKELY ROUTES OF EXPOSURE

Eye contact. Skin contact. LC₅₀ (rat): >7.03 mg/L (4 HR) LD₅₀ Oral (rat): > 5,000 mg/kg LD₅₀ Dermal (rat): > 5,000 mg/kg

Acute Toxicity Estimates: No data available Skin Irritation (rabbit): Harmful if absorbed.

Eye Irritation (rabbit): Causes moderate eye irritation

Specific Target Organ Toxicity: Single exposure: No data available.

Aspiration: No data available

Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenicity: No data available
Germ Cell Mutagenicity: No data available

Interactive Effects: None known

SDS NUMBER: 000890-15-LPI

SDS REVISIONS: FORMAT

KLEENUP® PRO SUPERSEDES: 08/28/13

12 ECOLOGICAL INFORMATION

12.3 ECOTOXICITY

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ecotoxicological Data

	Species	Test Results	
Glyphosate acid	Rainbow trout	5.4 mg/L – 96-hour LC₅0	_
	Bluegill	7.3 mg/L – 96-hour LC₅o	
	Bee	>100µ/bee – Contact LD50	

DATE OF ISSUE: 01/16/15

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available 12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available.

12.4 MOBILITY IN SOIL

No data available.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

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.

14 TRANSPORT INFORMATION

14.3 LAND TRANSPORT

DOT Shipping Description: NOT REGULATED BY USDOT

U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS 60)

15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings: NFPA HMIS

Health 0 Least Health Flammability Flammability Slight 0 Reactivity Instability 2 Moderate 0 3 В PPE High

4 Severe

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N Reactive N

SAFETY DATA SHEET

SDS NUMBER: 000890-15-LPI

SDS REVISIONS: FORMAT DATE OF ISSUE: 01/16/15

KLEENUP® PRO SUPERSEDES: 08/28/13

Reportable Quantity (RQ) under U.S. CERCLA: Not listed.

SARA, Title III, Section 313: Not listed. RCRA Waste Code: Not listed. CA Proposition 65: Not applicable

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

16 OTHER INFORMATION

SDS STATUS: Format revised.

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

®KleenUp is a registered trademark of Loveland Products, Inc.

EPA REG. NO.: 34704-890

Disclaimer and Limitation of Liability: This 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.