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

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

	PRODUCTS, INC. 6 • Greeley, CO 80632-1286		ncy Phone: 1-800-424-9300 hergencies: 1-866-944-8565 nse Center: 1-800-424-8802
PRODUCT NAME: CHEMICAL NAME: CHEMICAL FAMILY: EPA REG, NO.:	KLEENUP® PRO Glyphosate: N- (phosphonomethyl)glycine, in the form of its Group 9Herbicide 34704-890	s Isopropylamine salt	
MSDS Number: 00089		15 Date of Issue: 08/28/13	Supersedes: 02/04/09

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION – Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

This product is clear, viscous yellow-colored solution with amine odor. Primary routes of entry are Inhalation, eye contact and skin contact.

3. COMPOSITION, INFO	RMATION ON INC	GREDIENTS		
Chemical Ingredients: Perce Isopropylamine salt of Glyphosate Inert Ingredients		entage by Weight:	CAS No.	TLV (Units)
		41.00 59.00	38641-94-0	none established
4. FIRST AID MEASURE	S			
f in eyes: 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. f on skin or clothing: 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. FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565. Have the product container or label with you when calling a poison control center or doctor.				
5. FIRE FIGHTING MEAN FLASH POINT (°F/Test Methor FLAMMABLE LIMITS (LFL & EXTINGUISHING MEDIA: HAZARDOUS COMBUSTION SPECIAL FIRE FIGHTING PR UNUSUAL FIRE AND EXPLO	od): UFL): PRODUCTS: COCEDURES:	Toxic fumes may be emitted Wear self-contained breath	ng apparatus and full protective clothing contain runoff, using dikes to prevent of	. Fight fire from upwind.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

In case of leak or spill, contain material and dispose as waste. Do not contaminate any body of water. Sweep up material. Place it and damaged unusable containers in a landfill approved for pesticides. Check local, state and federal regulations for proper disposal. **CAUTION:** Prevent spilled material from flowing onto adjacent land, or into municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING:	Wash hands after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
STORAGE:	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. Roll or shake container or recirculate in mini-bulk or bulk containers to mix well before using. Keep tightly closed. Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:	When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.		
RESPIRATORY PROTECTION:			
EYE PROTECTION: SKIN PROTECTION:	Chemical goggles or shielded safety glasses. Wear protective clothing: long-sleeved shirts and pants, and shoes plus socks. Wear chemical-resistant gloves.		
	For product	OSHA PEL 8 hr TWA none established	ACGIH TLV-TWA none established

Personal Protective Equipment (PPE): Applicators and other handlers must wear: long sleeved shirt and long pants, shoes plus socks, and chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride. Discard clothing and other absorbent material that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

 APPEARANCE AND ODOR: Clear, viscous yellow-colored solution with amine odor

 SPECIFIC GRAVITY (Water = 1): 1.1680 g/ml
 BULK DENSITY: 9.75 lbs/gal.

 VAPOR PRESSURE: Not established
 BOILING POINT: Not established

 PERCENT VOLATILE (by volume): Not established
 EVAPORATION RATE: Not established

 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.

SOLUBILITY: Soluble **pH:** 4.4 (1% solution))

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Use of galvanized or unlined steel.

INCOMPATIBILITY: 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.

HAZARDOUS DECOMPOSITION PRODUCTS: Will emit toxic fumes as it burns.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): >5000 mg/kg Eye Irritation (rabbit): Causes moderate eye irritation Inhalation LC₅₀ (rat): >7.03 mg/L (4 Hr. Aerosol) Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH Acute Dermal LD₅₀ (rabbit): >5000 mg/kg Skin Irritation (rabbit): Essentially non-irritating Skin sensitization (guinea pig): Not a sensitizer

12. ECOLOGICAL INFORMATION

This product is slightly to moderately toxic in aquatic studies. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. This product has been shown to be practically non-toxic to avian species following sub-acute dietary exposure. Do not contaminate water when disposing of equipment wash waters. Do not apply when weather conditions favor drift from target area.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleansed, reconditioned, or destroyed. Container Disposal Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. For packages greater than 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Disposal Considerations, continued

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances.

14. TRANSPORT INFORMATION

DOT Shipping Description: NOT REGULATED USDOT.

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

Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA	HMIS	
	1 Health 1 Flammability 1 Instability	1 Slight 1 Fla	ealth ammability eactivity PE
SARA Hazard Notification/Reporting SARA Title III Hazard Category:	Immediate Y Delayed N	Fire <u>N</u> Reactive <u>N</u>	Sudden Release of Pressure <u>N</u>

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 listed

CAUTION – 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.

16. OTHER INFORMATION

MSDS STATUS: Sections 1, 8, 13 and 15 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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