VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet
Hi-Yield® KILLZALL Quick Weed and Grass Killer

SECTION 1: Identification

Product identifier

Product name	Hi-Yield® KILLZALL Quick Weed and Grass Killer
Product number	19713-642-7401
Brand	Hi-Yield
Substance name	Glyphosate, Pelargonic acid

Other means of identification
EPA # 19713-642-7401

Supplier's details

Name	Voluntary Purchasing Groups, Inc.
Address	230 FM 87 Bonham, TX 75418 USA
Telephone	855-270-4776

Emergency phone number(s)

In the event or a medical or chemical emergency contact ChemTel, Inc.
North American 1-800-255-3924 or worldwide Intl. + 01-813-248-0585

SECTION 2: Hazard identification

General hazard statement
Harmful if inhaled.
Causes serious eye damage.
Causes severe skin burns and eye damage.
Toxic to aquatic life

Classification of the substance or mixture
- Acute toxicity, inhalation (chapter 3.1), Cat. 4
- Eye damage/irritation (chapter 3.3), Cat. 1
- Skin corrosion/irritation (chapter 3.2), Cat. 1B

GHS label elements, including precautionary statements

Pictogram



Signal word	**Danger**

Hazard statement(s)

H318	Causes serious eye damage
H401	Toxic to aquatic life
H332	Harmful if inhaled
H314	Causes severe skin burns and eye damage

Precautionary statement(s)

P102	Keep out of reach of children.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash … thoroughly after handling.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363	Wash contaminated clothing before reuse.
P310	Immediately call a POISON CENTER/doctor/...
P321	Specific treatment (see … on this label).
P405	Store locked up.
P501	Dispose of contents/container to …

SECTION 3: Composition/information on ingredients

Mixtures

Substance name	Glyphosate, Pelargonic acid

Hazardous components

1. N-(Phosphonomethyl)glycine, monoisopropylamine salt solution

Concentration	2 %
Other names / synonyms	Glyphosate-isopropylammonium;
CAS no.	38641-94-0

2. Pelargonic acid, ammonium salt

Concentration	2 %
CAS no.	63718-65-0

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.
If inhaled	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
In case of skin contact	Immediately flush skin with water while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Destroy contaminated leather items such as shoes, belts, and watchbands.
In case of 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. Immediately call a doctor or poison control center.
If swallowed	Call a poison control center or doctor immediately for treatment advice. Rinse mouth with water then have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Have product label with you when calling a poison control center or doctor

Indication of immediate medical attention and special treatment needed, if necessary
Note to Physician: No specific antidote. Treatment of exposure should be directed at control of symptoms and the clinical condition of the patient.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Water spray, fog, dry foam, dry chemical or carbon dioxide (CO2).

Specific hazards arising from the chemical
Thermal decomposition during a fire can produce fumes and irritating gases. Hazardous Combustion Products: Hydrogen chloride, oxides of carbon, nitrogen and phosphorus.

Special protective actions for fire-fighters
Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear. Evacuate the area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect fire-extinguishing water to prevent environmental damage with excessive water runoff.

Further information
Flammability classification (OSHA 29 CFR 1910.1200): Non-combustible
Flash point: >200°F

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling and Storage, for additional precautionary measures. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls

and Personal Protection.

Environmental precautions
This product is toxic to plants. Drift and run-off may be hazardous to plants in water adjacent to treated areas.

Methods and materials for containment and cleaning up
Clean up spills immediately, observing precautions in Section 8 of this SDS. Isolate hazard area. Keep unnecessary personnel from entering.
Small Spills: Contain small spill by diking with a suitable absorbent material such as earth, sand or clay. Sweep up absorbed spill and place material in appropriate recovery drums for disposal.
Large Spills: Contain large spills by diking with a suitable absorbent material such as earth, sand or clay and recover for disposal. After removal, decontaminate tools and equipment. Wash the spill area, tools, and equipment with strong soap and water solution. Absorb any excess liquid and add to the recovery drums of waste already collected. Dispose all wastes as described in Section 13. Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

SECTION 7: Handling and storage

Precautions for safe handling
Do not get in eyes or on clothing. Avoid contact with skin. Users should wash hands 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 Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities
Store product in original container in a safe place and protect from freezing. Do not contaminate water, food, or feed by storage or disposal.
Store in a cool, dry, well ventilated, and secure area designated specifically for pesticides and away from heat sources. Keep in original containers and keep containers closed when not in use. Do not store in excessive heat. Do not store near children, food, foodstuffs, drugs or potable water supplies.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls
Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Wear protective eyewear (goggles, safety glasses, face shield)

Skin protection
Long-sleeved shirt, long pants, shoes, socks and chemical resistant gloves.

Body protection
General: Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Clear liquids
Odor	Slightly Fatty
Odor threshold	
pH	4.0-5.5
Melting point/freezing point	
Initial boiling point and boiling range	
Flash point	Not flammable
Evaporation rate	
Flammability (solid, gas)	Not determined
Upper/lower flammability limits	
Vapor pressure	
Vapor density	
Relative density	8.91 lbs./gal.
Solubility(ies)	Soluble
Partition coefficient: n-octanol/water	
Auto-ignition temperature	
Decomposition temperature	
Viscosity	
Explosive properties	Non-explosive
Oxidizing properties	

SECTION 10: Stability and reactivity

Reactivity
HAZARDOUS POLYMERIZATION: Will not occur.

Chemical stability
Stable under all normal use and storage conditions.

Conditions to avoid
Avoid excessive heat and fire.

Incompatible materials
Strong oxidizing agents, acids and bases. Reducing agents

Hazardous decomposition products
Hydrogen chloride, oxides of carbon, nitrogen, and phosphorus.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Ingestion:
 Glyphosate IPA salt: Oral, LD50, (rat) : >5,000 mg/kg
 Pelargonic acid: Oral, LD50, (rat): 5,000 mg/kg
Dermal:
 Glyphosate IPA salt: Dermal, LD50, (rabbit): >5,000 mg/kg
 Pelargonic acid: Dermal, LD50, (rabbit): 2,000 mg/kg
Inhalation
 Glyphosate IPA salt: LC50, (4h), Aerosol, (rat): >2.9 mg/l
 Pelargonic acid: LC50, 4h, (rat): >5.29 mg/l

Skin corrosion/irritation

Skin Irritation (rabbit):
 Glyphosate IPA salt: Non-irritating
 Pelargonic acid: Causes skin irritation

Serious eye damage/irritation
Eye Irritation (rabbit):
 Glyphosate IPA salt: Slightly irritating
 Pelargonic acid: May cause severe eye irritation and corneal injury

Respiratory or skin sensitization
Sensitization Skin (Guinea Pig):
 Glyphosate IPA salt: Non-sensitizer
 Pelargonic acid: Non-sensitizer

Germ cell mutagenicity
No evidence of mutagenic effects during in vivo and in vitro assays.

Carcinogenicity
EPA: Not Listed ACGIH: Not Listed IARC: Group 2A1 NTP: Not Listed OSHA: Not Listed
1 Carcinogenicity: Not carcinogenic in rats or mice. Listed as Category 2A by the International Agency for Research on Cancer (IARC) but, in the expert opinion of the Joint Glyphosate Task Force, this classification as a carcinogen is not warranted.

Reproductive toxicity
Not known to cause reproductive or birth defects at normal exposure levels.

SECTION 12: Ecological information

Toxicity
This product is toxic to plants. Drift and run-off may be hazardous to plants in water adjacent to treated areas.
The following information is for the active ingredient, Glyphosate acid and Pelargonic acid
Persistence and Degradability:
 Glyphosate:
o Soil field half-life 2-174 days. Adsorbs strongly to soil.
o Water aerobic half-life < 7 days.
 Pelargonic acid:
o Not expected to have adverse effects on non-target organisms or the environment. The chemical decomposes rapidly in both land and water environments, does not accumulate
Aquatic Toxicity:
 Glyphosate:
o Rainbow Trout, 96 hour, LC50: 5.4 mg/L
o Bluegill, 96 hour, LC50: 7.3 mg/L
o Daphnia magna, 48 hour, EC50:11 mg/L
 Pelargonic acid:
o Rainbow Trout, 96 hour, LC50: 61-110 mg/L
o Daphnia magna, 48 hour, EC50: 58-108 mg/L
Bird Toxicity:
 Glyphosate:
o Mallard duck, 5-day, dietary, LC50: >5620 mg/kg
o Bobwhite quail, 5-day, dietary, LC50: >5620 mg/kg
Arthropod Toxicity:
 Glyphosate:
o Honey bee, oral/contact, 48 hrs, LD50: 100µg/bee
Soil Organism Toxicity:
 Glyphosate:
o Earthworm, acute toxicity, 14 days, LC50: >1200 mg/kg soil

Persistence and degradability
 Glyphosate:
o Soil field half-life 2-174 days. Adsorbs strongly to soil.
o Water aerobic half-life < 7 days.
Pelargonic acid:
o Not expected to have adverse effects on non-target organisms or the environment. The chemical decomposes

SECTION 13: Disposal considerations

Disposal of the product
Do not contaminate water, food or feed by disposal.
Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Disposal of contaminated packaging
Nonrefillable container, do not reuse or refill this container. Refer to product label for specific container disposal instructions.

SECTION 14: Transport information

DOT (US)
Not regulated by DOT.

IMDG
IMO - UN3082 Environmentally Hazardous Substance, Liquid, N.O.S. (contains Glyphosate, Pelargonic acid), 9, PG III, Marine Pollutant

IATA
UN3082 Environmentally Hazardous Substance, Liquid, N.O.S. (contains Glyphosate, Pelargonic acid), 9, PG III

SECTION 15: Regulatory information

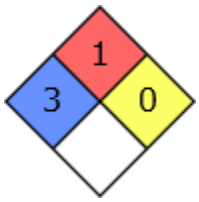
Chemical Safety Assessment
IFRA –
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label: PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER. Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin.
See label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal Instructions.
ENVIRONMENTAL HAZARDS
This product is toxic to plants. Drift and run-off may be hazardous to plants in water adjacent to treated areas. 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 washwater or rinsate. See Directs for Use for additional precautions and requirements.
All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory

information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.
SARA Title III – Section 302 Extremely Hazardous Substances
Not listed
SARA Title III – Section 311/312 Hazard Categories
Immediate (Acute)
SARA Title III – Section 312 Threshold Planning Quantity
N/A
SARA Title III – Section 313 Reportable Ingredients
None
CERCLA Reportable Quantity (RQ) –
None
CALIFORNIA PROP 65 STATUS –
This product does not contain any chemical known to the state of California to cause cancer or reproductive harm.
CANADA –
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

HMIS Rating

Glyphosate, Pelargonic acid	
HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.
Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.
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