

MATERIAL SAFETY DATA SHEET



Hi-Yield® Killzall Aquatic Herbicide

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

Voluntary Purchasing Groups, Inc.
230 FM 87
Bonham, Texas 75418

Effective Date: May 11, 2012

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Hi-Yield® Killzall Aquatic Herbicide
EPA No.: 7401-459

COMPANY IDENTIFICATION:

Voluntary Purchasing Groups, Inc.
230 FM 87
Bonham, TX. 75418

2. COMPOSITION / INFORMATION ON INGREDIENTS:

INGREDIENTS:	CAS. Reg. #	Approx. %	TLV
Glyphosate***	1071-86-6	53.8%	N/A

***Hazardous chemicals under the criteria of the OSHA Hazard Communication Standard (29 CFR 19.10.1200)

3. PHYSICAL AND CHEMICAL CHARACTERISTICS:

BOILING POINT: N/A	VAPOR PRESSURE (mm/Hg): N/A
MELTING POINT: N/A	VAPOR DENSITY (air=1): N/A
SPECIFIC GRAVITY: 1.17 (Water - 1)	REACTIVITY IN WATER: N/A
SOLUBILITY IN WATER: Soluble	
APPEARANCE AND ODOR: Amber-colored solution; practically odorless to slight amine-like odor.	

4. FIRE AND EXPLOSION DATA:

FLASH POINT:	>93°C (>200°F) (Pensky Martens closed tester)
FLAMMABLE LIMITS:	N/A LEL: N/A UEL: N/A
EXTINGUISHER MEDIA:	Water spray, foam, dry chemical, carbon dioxide or any class B extinguishing agent.
SPECIAL FIRE FIGHTING PROCEDURES:	Fight fire upwind. Avoid heavy hose streams. Dike area to prevent water runoff. Firefighters and others that may be exposed to vapors, mists, or products of combustion should wear full protective clothing and selfcontaining breathing apparatus. Equipment should be thoroughly cleaned after use.

5. PHYSICAL HAZARDS (REACTIVITY DATA):

STABILITY:	This product is stable for at least 5 years under normal conditions of warehouse storage.
CONDITIONS TO AVOID:	None
INCOMPATIBILITY, MATERIAL TO AVOID:	Do not mix, store or apply this product or spray solutions of this product in galvanized or unlined steel (except stainless steel) containers or spray tanks. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark welder's torch lighted cigarettes or other ignition source.

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HAZARDOUS DECOMPOSITION PRODUCTS:

None. However, the essential breakdown products are carbon monoxide, carbon dioxide, phosphorus pentoxide and nitrogen oxide.

HAZARDOUS POLYMERIZATION:

Does not occur. This product can react with caustic (basic) materials to liberate heat. This is not a polymerization, but rather a chemical neutralization in an acid base reaction.

CONDITIONS TO AVOID (POLY):

None

6. HEALTH HAZARDS:

A. EXPOSURE LIMITS

OSHA Permissible Exposure Limit (PEL): Not Established

Threshold Limit Value (TLV): N/A

B. ROUTE OF ENTRY

Inhalation: Yes

Eyes: No

Ingestion: No

Skin: Yes

C. HEALTH HAZARD, ACUTE AND CHRONIC:

Eye Contact: May cause pain, redness and tearing based on toxicity studies.

Skin Contact: Is no more than slightly toxic and no more than slightly irritating based on toxicity studies.

Ingestion: Is no more than slightly toxic based on toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed. Ingestion of similar formations has been reported to produce gastrointestinal discomfort with irritation of the mouth, nausea, vomiting and diarrhea. Oral ingestion of large quantities of one similar product has been reported to result in hypotension and lung edema.

Inhalation: Is no more than slightly toxic if inhaled based on toxicity studies.

D. EMERGENCY FIRST AID PROCEDURES:

Eyes: Immediately hold eyelids open and flush with plenty of water for at least 15 minutes. Get medical attention.

If Swallowed: This product will cause gastrointestinal tract irritation. Immediately dilute by swallowing water or milk. Get medical attention.

Inhalation: Remove individual to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

E. ADDITIONAL INFORMATION:

For additional human emergency first aid or treatment guidance, call 800-424-9300.

7. STORAGE AND DISPOSAL & SPILL/LEAK PROCEDURES:

HANDLING: Do not get in eyes or on clothing. Avoid breathing vapor or spray mist. 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. Spray solutions of the product should be mixed, stored or applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined containers. **Do not mix, store or apply this product or spray solutions of this product in galvanized or unlined steel (except stainless steel) containers or spray tanks.** Do not apply directly to water, 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.

STORAGE: Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

DISPOSAL: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of 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 cleaned or destroyed. **DO NOT CUT OR WELD ON OR NEAR THIS CONTAINER.**

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Plastic Containers: Do not reuse container. Triple rinse container. Then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

ACCIDENTAL RELEASE OF MATERIAL & WASTE DISPOSAL METHODS:

Small Spills on the floor or other impervious surface, should be soaked up with towels or other absorbent material and discard in the trash. Clean the spill area with soap and water and rinse the area thoroughly.

Large Liquid Spills on the floor or other impervious surface should be contained or diked and absorbed with attapulgite, benionite or other absorbent clays. Collect the contaminated absorbent, place in a metal drum and dispose of in accordance with applicable Federal, State or Local procedures. Thoroughly scrub floor or other impervious surface with a strong industrial detergent and rinse with water.

8. SPECIAL PROTECTION/CONTROL MEASURES:

VENTILATION:	No special precautions are recommended.
SPECIAL VENTILATION:	N/A
EYE PROTECTION:	Wear chemical splash goggles during mixing/pouring operations or other activities in which eye contact with the undiluted solution is likely to occur.
SKIN PROTECTION:	Wear appropriate protective clothing to prevent skin contact. Applicators and other handlers must wear long-sleeved shirt, long pants, shoes plus socks and protective eyewear. Discard clothing and other absorbent materials 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. ENVIRONMENTAL EFFECTS DATA:

This product has been shown to be slightly to moderately toxic in aquatic studies and has been shown to be practically non-toxic to avian species following subacute dietary exposure.

10. TRANSPORTATION DATA:

Not regulated by DOT or IMDG.

11. OTHER INFORMATION:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Voluntary Purchasing Groups, inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Voluntary Purchasing Groups, Inc. has been advised of the possibility of such damages.