MATERIAL SAFETY DATA SHEET



Hi-Yield® Crabgrass Control

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

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

Effective Date: May 23, 2012

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Hi-Yield® Crabgrass Control **FORMULA:** Mixture **EPA #:** 62719-137-7401

COMPANY IDENTIFICATION:

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

2. COMPOSITION/INFORMATION ON INGREDIENTS:

HAZARDOUS COMPONENT	CAS NUMBER	% (TYPICAL)	TLV (UNITS)	PEL (UNITS)
N-butyl-N-ethyl, alpha, alpha, alphatrifluoro- 2, 6-dinitro-p-toludine	1861-40-1	1.33	Not established	Not established
alpha, alpha, alpha-Trifluoro-2, 6-dinitro-N, N-dipropyl-p-toluidine (Trifluralin)*	1582-09-8	0.67	Not established	Not established

* This substance is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration. TLV: Threshold Limit Value recommended by the American Conference of Governmental Industrial Hygienists.

3. PHYSICAL DATA:

BOILING POINT (°F)	SPECIFIC GRAVITY (H ₂ O=1)		VAPOR PRESSURE (mm Hg)		
Does not apply	Not established			Does not apply	
PERCENT VOLATILE BY VOLUME	(%) VAPOR DENSITY (AIR=1)		EVAPORATION RATE (ethyl ether=1)		
Does not apply	Does not ap		ply	Does not apply	
SOLUBILITY IN WATER			REACTIVITY II	N WATE	R
Insoluble			Does not apply		
APPEARANCE AND ODOR					
Granular; slight aromatic odor					

4. FIRE AND EXPLOSION DATA:

FLASH POINT (°F)	FLAMMABLE LIMITS IN AIR (% by volume)		
Does not apply	Lower: Does not apply Upper: Does not apply		
EXTINGUISHING MEDIA	AUTO IGNITION TEMPERATURE		
Dry chemical, carbon dioxide, halon, water spray, fo	Does not apply		
UNUSUAL FIRE AND EXPLOSION HAZARDS			
If product is involved in fire, noxious, toxic fumes may be produced.			
SPECIAL FIRE FIGHTING PROCEDURES			
None			

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5. HEALTH INFORMATION:

PRIMARY ROUTES OF EXPOSURE		RGANS			
Eyes, skin, gastrointestinal tract, ingestion					
SIGNS AND SYMPTOMS OF EXPOS	URE				
(1) ACUTE OVEREXPOSURE					
	Possible eye and skin irritation. There have been no reports of significant exposure of workers to Trifluralin				
Technical. There is extensive field experience involving a variety of TREFLAN (trifluralin) products, some of which					
contain organic solvents. Events cannot be easily categorized in relation to the various product forms. The more					
	commonly reported adverse effects following exposure to TREFLAN products are skin irritation and rash; nausea,				
vomiting, cramping, and diarrhea, eye irritation, dizziness, headache, and other minor central nervous system					
effects; fever and or chills; and muscle aches or weakness. Except for some reports of skin or eye irritation, it is					
difficult to establish a cause/effect rela	itionsnip.				
(2) CHRONIC OVEREXPOSURE	abrania tartanar	in and reproductive t	ovicity studies in the sectory opineds		
The following effects were reported in where experimental dosage levels and					
Studies were conducted at exposures as high as 800,000 times greater than the expected exposure of applicators					
using TREFLAN. Chronic Toxicity- Growth retardation, reduced food consumption, reduced survival, increased liver weights and kidney toxicity. Teratology & Reproduction- Not teratogenic. No impairment of reproductive					
capacity. Fetotoxic only at maternally toxic doses in studies. Matagenicity- Not mutagenic in either bacterial or					
mammalian cells. Carcinogenicity-NCI-Evidence of carcinogenicity (invalid study due to nitrosamine impurity).					
	EPA-Class C- possible human carcinogen (limited evidence from animal studies). Toxicological studies support				
noncatcinogen status. Not listed as a carcinogen or potential carcinogen by ACGIH, IARC, NTP, or OSHA.					
	Technical trifluralin may cause skin sensitization reaction in certain individuals.				
MEDICAL CONDITIONS GENERALLY	Y AGGRAVATED) BY EXPOSURE			
Disorders of the skin, eyes and centra	l nervous system				
CHEMICAL/COMPONENT LISTED A			RCINOGEN		
None					
NTP	IARC		OSHA		
🗆 YES 🖾 NO	🗆 YES	🖾 NO			
OTHER EXPOSURE LIMITS					
None determined					
EMERGENCY AND FIRST AID PROC					
EYE OR SKIN CONTACT: Flush with					
contaminated skin with soap and water. INGESTION: Do not induce vomiting. Give milk or water. Never give					
anything by mouth to an unconscious person. Call a physician. Harmful if swallowed. Keep out of reach of					
children.					

6. REACTIVITY DATA:

STABILITY	CONDITIONS TO AVOID None	
INCOMPATIBILITY (Materia		
INCOMPATIBILITY (Materia	s to Avoid)	
HAZARDOUS DECOMPOSITION PRODUCTS		
Thermal decomposition may produce toxic gases		
HAZARDOUS POLYMERIZA		
May Occur Will N		
	broccur None	

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7. SPILL OR LEAK PROCEDURES:

STEPS TO BE TAKEN IN CASE MATERIAL IS LEAKED OR SPILLED Sweep into labeled container and seal. Do not flush with water. WASTE DISPOSAL METHOD Dispose of in accordance with Federal, State, and local regulations. Triple rinse containers prior to disposal.

8. PERSONAL PROTECTION INFORMATION:

RESPIRATORY PROTECTION

Utilize NIOSH/MSHA approved respiratory protection as necessary to provide protection against pesticides.

VENTILATION Use in well-ventilated area.

PROTECTIVE GLOVES

Utilize impermeable gloves

EYE PROTECTION

Use safety glasses to prevent eye contact.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Use protective clothing such as coveralls, a long sleeved shirt, and impermeable gloves when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PRECAUTIONS TO BE TAKEN IN HANDLING & STORING Do not store or transport with food, feed, or seed. Do not store near heat or open flames. OTHER PRECAUTIONS Not determined.

10. TRANSPORT INFORMATION:

Not regulated by DOT or IMDG.

11. OTHER INFORMATION:

The information contained within was obtained from authoritative sources and is believed to be accurate for the manner in which the product is intended to be used. Other uses could result in ramifications, which are not included within this document.