VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet
Hi-Yield® Herbicide Granules Containing Treflan®

SECTION 1: Identification

Product identifier

Product name	Hi-Yield® Herbicide Granules Containing Treflan®
Product number	EPA# 7401-349-10159

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

Classification of the substance or mixture

GHS label elements, including precautionary statements

Hazard statement(s)

Irritating to eyes
Limited evidence of a carcinogenic effect
May cause sensitization by skin contact
Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Harmful. May cause lung damage if swallowed.

Precautionary statement(s)

Keep out of reach of children
Do not breathe fumes/spray
Avoid contact with skin and eyes
Wear suitable protective clothing and gloves
This material and it's container must be disposed of as hazardous waste
Avoid release to the environment. Refer to special insturcitons in section 6.
If swallowed, do not induce vomiting: seek medical advice immediately and show the container or label where possible

Other hazards which do not result in classification

SECTION 3: Composition/information on ingredients

Substances

Hazardous components

Component	Concentration
Trifluralin [1] 1.47% (typical) TLV: NE PEL: NE (CAS no.: 1582-09-8)	**Not specified**

[1] NOTE: This is a toxic chemical and is subject to the reporting requirements of section 313 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.
NE: Not Established
Not specified

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice — Call a poison control center or doctor in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur, seek medical attention immediately.

If inhaled — Move person to fresh air. If person is not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a poison control center or doctor for treatment advice.

In case of skin contact — Take of contaminated clothing. Wash skin with soap and plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing separately before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly.

In case of eye contact — Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

If swallowed — Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a doctor or poison control center. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Personal protective equipment for first-aid responders — First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to section 8 for specific persona protective equipment.

Indication of immediate medical attention and special treatment needed, if necessary
Notes to physician: Maintain adequate ventilation and oxygenation of the patient. The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and /or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No

specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet , and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment. Skin contact may aggravate pre-existing dermatitis.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. General purpose synthetic foams (including AFFF type) or protein foams are preferred if available. Alcohol resistant foams (ATC type) may function. Water fog, applied gently may be used as a blanket for fire extinguishment.

Do not use direct water stream. May spread fire.

Specific hazards arising from the chemical
During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and /or irritating. Combustion products may include and are not limited to: Nitrogen oxides, Hydrogen fluoride, Fluorinated hydrocarbons, Carbon monoxide, Carbon dioxide.

Container may vent and/or rupture due to fire. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate.

Special protective actions for fire-fighters
Keep people away. Isolate fire and deny unnecessary entry. Consider feasibility of a controlled burn to minimize environment damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment. Contain fire water run-off if possible. Fire water run-off, if not contained may cause environmental damage.

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep up-wind of spill. Ventilate area of leak or spill. No smoking in area. Use appropriate safety equipment. Refer to section 7 and 8 for additional precautions.

Environmental precautions
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods and materials for containment and cleaning up
Contain spilled material if possible.
Small spills: Absorb with materials such as: clay, dirt, sand. Sweep up. Collect in suitable and properly labeled containers.
Large spills: See section 13 for Disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Keep away from heat, sparks, and flames. Keep out of reach of children. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Do not swallow. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

Conditions for safe storage, including any incompatibilities
Store in a dry place. store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs, or potable water supplies.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls
Use only with adequate exhaust ventilation.

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

Eye/face protection
Use safety glasses (with side shields). If exposure causes eye discomfort, use a full-face respirator.

Skin protection
Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Styrene/butadiene rubber. Refer to glove manufacturer for instructions and specifications.

Body protection
Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection
Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Granular
Odor	Dusty
Odor threshold	
pH	
Melting point/freezing point	
Initial boiling point and boiling range	
Flash point	
Evaporation rate	
Flammability (solid, gas)	
Upper/lower flammability limits	
Upper/lower explosive limits	
Vapor pressure	
Vapor density	
Relative density	1.070
Solubility(ies)	Emulsifies in water

Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
Explosive properties
Oxidizing properties

Other safety information
Note: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: Stability and reactivity

Reactivity
No dangerous reaction known under conditions of normal use.

Chemical stability
Unstable at elevated temperatures.

Possibility of hazardous reactions
Polymerization will not occur.

Conditions to avoid
Exposure to elevated temperatures can cause product to decompose.

Incompatible materials
Avoid contact with oxidizing materials.

Hazardous decomposition products
Decomposition products depend upon temperature, air supply, and the presence of other materials. Decomposition products can include and are not limited to: Fluorinated hydrocarbons and nitrogen oxides.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Prolonged excessive exposure may cause adverse effects. May cause central nervous system effects. Symptoms may include headache, dizziness and drowsiness, progressing to in-coordination and unconsciousness.

Acute inhalation toxicity
For the active ingredient: Trifluralin: Vapours are unlikely due to physical properties. No adverse effects are anticipated from single exposure to dust. Based on the available data, respiratory irritation was not observed.
For the solvent(s): Prolonged excessive exposure may cause adverse effects. May cause central nervous system effects. symptoms may include headache, dizziness and drowsiness, progressing to incoordination and unconsciousness.

Skin corrosion/irritation
Brief contact is essentially non-irritating to skin. May cause drying and flaking of the skin.

Serious eye damage/irritation
May cause slight eye irritation. Corneal injury is unlikely. Vapor may cause eye irritation experienced as mild discomfort and redness.

Respiratory or skin sensitization
For the active ingredient: Trifluralin: Skin contact may cause an allergic skin reaction.
For the solvent(s): Did not cause allergic skin reactions when tested in guinea pigs.
For respiratory sensitization: No relevant data found.

Carcinogenicity
For the active ingredient: Trifluralin: A low incidence of urinary tract tumors was seen in only 1 of 5 chronic studies in rats. Trifluralin is not anticipated to be a carcinogenic risk to humans.

Reproductive toxicity
Teratogenicity:
For the active ingredient: Trifluralin: Has been toxic to the foetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.
For the solvent(s): Did not cause birth defects or any other foetal effects in laboratory animals.

Reproductive toxicity:
For the active ingredient: Trifluralin: In animal studies, did not interfere with reproduction.
For the solvent(s): In animal studies, did not interfere with reproduction.

Mutagenicity:
For the active ingredient: Trifluralin: In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were predominantly negative.
For the solvent(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

STOT-single exposure
May cause drowsiness or dizziness.

STOT-repeated exposure
For the active ingredient: Trifluralin: In animals, effects have been reported on the following organs: Blood, Kidney, Liver, Thyroid.
For the solvent(s): Based on available data: repeated exposures are not anticipated to cause significant adverse effects.

Aspiration hazard
May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

Toxicity
Materials are very toxic to aquatic organisms. Materials are practically non-toxic to birds.

Persistence and degradability
Product is tightly bound to soil and is extremely resistant to leaching and elution. Degradation occurs by volatilization, photodegradation, aerobic and anaerobic mechanisms, as the more usual routes. Half life in soils is dependent on soil type and condition.

Bioaccumulative potential
Bioconcentration potential is high.

Mobility in soil
Expected to be relatively immobile in soil.

Results of PBT and vPvB assessment
Not considered to be PBT and vPvB.

SECTION 13: Disposal considerations

Disposal of the product
If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local, state, and federal regulatory requirements. It is the responsibility of the waste generator to determine the the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

Disposal of contaminated packaging
Same as above.

SECTION 14: Transport information

DOT (US)
Not regulated by DOT or IMDG.

UN Number: 3082
Class: 9
Packing Group: lll
Proper Shipping Name:
Reportable quantity (RQ):
Marine pollutant:
Poison inhalation hazard:

IMDG
Not regulated by DOT or IMDG.

UN Number: 3082
Class: 9
Packing Group: lll
EMS Number:
Proper Shipping Name:

IATA
Not regulated.

UN Number: 3082
Class: 9
Packing Group: lll
Proper Shipping Name:

SECTION 15: Regulatory information

HMIS Rating

Hi-Yield® Herbicide Granules Containing Treflan®	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	I

NFPA Rating

SECTION 16: Other information

Preparation 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.