



Safety Data Sheet

Section 1: Identification

Product identifier

Product Name

- **Howard Johnson's Trifluralin 5G**

Synonyms

- EPA Reg. No.: 53883-240-32802; FertCDRspSS

Product Code

- FertCDRspSS

Product Description

- Variable colored granules.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use

- Herbicide for lawns and turf.

Restrictions on use

- Keep out of reach of children and domestic animals. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flames.

Details of the supplier of the safety data sheet

Manufacturer

- Howard Johnson's Enterprises, Inc.
9675 S. 60th Street
Franklin, WI 53132
United States
www.hjefertilizer.com

Telephone (General) • (414) 394-3590 - 8:30am - 5:00pm CST

Emergency telephone number

Manufacturer

- 1-800-424-9300 - CHEMTREC - Transportation and Non-Transportation related emergencies

Manufacturer

- 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012

- Respiratory Sensitization 1A
Combustible Dust
Skin Sensitization 1

Label elements

OSHA HCS 2012

DANGER

- Hazard statements** • May cause allergy or asthma symptoms or breathing difficulties if inhaled
 May form combustible dust concentrations in air.
 May cause an allergic skin reaction

Precautionary statements

- Prevention** • Avoid breathing vapors, dust, mist or spray.
 In case of inadequate ventilation wear respiratory protection.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison control center or doctor.
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
 IF ON SKIN: Wash with plenty of soap and water.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
- Storage/Disposal** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

OSHA HCS 2012

- This pesticide is extremely toxic to freshwater, marine and estuarine fish, and aquatic invertebrates including shrimp and oyster. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients**Substances**

- Material does not meet the criteria of a substance according to United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Mixtures

Composition		
Chemical Name	Identifiers	%
Trifluralin	CAS:1582-09-8	5%
Peanut hulls	NDA	> 5%
Other ingredients	NDA	Balance

Section 4: First-Aid Measures**Description of first aid measures**

- Inhalation**
- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms occur.
- Skin**
- IF ON SKIN: Wash skin with soap and water. If irritation or rash occurs, get medical advice/attention. Take off contaminated clothing and wash before reuse.
- Eye**
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- IF SWALLOWED: Call a POISON CONTROL center or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting unless directed by medical personnel.

Most important symptoms and effects, both acute and delayed

- May cause allergy or asthma symptoms or breathing difficulties if inhaled due to peanut hulls. May cause an allergic skin reaction in individuals with a sensitivity to Trifluralin. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media**
- SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.
LARGE FIRE: Water spray, fog or regular foam.
- Unsuitable Extinguishing Media**
- Avoid heavy hose streams.
- Firefighting Procedures**
- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions.
LARGE FIRES: Dike fire control water for later disposal; do not scatter the material. Move containers from fire area if you can do it without risk.
Stay upwind.
Combustible dust - use low-pressure medium fog streams to avoid dust clouds.
Eliminate ignition sources.
Do not breathe gas/fumes/vapor/spray.
Do not walk through spilled material.

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
- Hazardous Combustion Products**
- Irritating or toxic substances may be emitted upon burning, combustion or decomposition.

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Avoid contact with skin, eyes, and clothing. Wear appropriate personal protective equipment, avoid direct contact. Ventilate enclosed areas. Avoid dust formation and breathing dust.

Emergency Procedures

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Contain spill and monitor for excessive dust accumulation. Keep unauthorized personnel away. Ventilate closed spaces before entering.

Environmental precautions

- Avoid runoff to waterways and sewers.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Sweep or scoop up spills, dispose of any unusable material in approved landfill. Use appropriate Personal Protective Equipment (PPE). Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal. Avoid generating dust. Dust Deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Avoid contact with skin, eyes, and clothing. Avoid breathing dust. To minimize dust generation and accumulation, spills should be cleaned up and dust accumulations should be removed promptly. Wash thoroughly with soap and water after handling. Take precautionary measures against static charges. No open flames, no sparks and no smoking.

Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool/low-temperature, well-ventilated, dry place. Keep out of reach of children. Keep container tightly closed. Avoid humid, wet or moist conditions. Keep away from incompatible materials such as strong acids. Ventilate enclosed areas.

Incompatible Materials or Ignition Sources

- Keep away from combustible and flammable materials. Heat, sparks, open flame.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines

- It is recommended that dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Exposure controls

Engineering Measures/Controls

- Local exhaust ventilation. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment). Use only appropriately classified electrical equipment.

Personal Protective Equipment

Pictograms



Respiratory

- If airborne dust is present or in case of inadequate ventilation, use appropriate respiratory protection. Use of half/full face air purifying or N95 dust mask is recommended.

Eye/Face

- Wear safety glasses.

Hands

- Wear appropriate gloves.

Skin/Body

- If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact. Use full body suit such as Tyvek or Tychem suit is recommended.

General Industrial Hygiene Considerations

- Handle in accordance with good industrial hygiene and safety practice. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Environmental Exposure Controls

- Avoid release to the environment.

Other Information

- See product label for specific use PPE instructions.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Variable colored granules.
Color	Varies	Odor	Varies
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	No data available	Bulk Density	45 to 80 lb(s)/ft ³
Water Solubility	No data available	Viscosity	Not relevant
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	No data available
LEL	No data available	Autoignition	No data available

Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- This material is friable and can create small dust particles during any handling, processing, and transfer operations. This material can form explosive dust/air suspensions that are ignitable under some conditions.

Chemical stability

- Stable

Possibility of hazardous reactions

- Hazardous polymerization will not occur. May form combustible dust concentrations in the air.

Conditions to avoid

- Extreme heat, high humidity or moisture. Heat, sparks, open flame.

Incompatible materials

- Heat, sparks, open flame, strong oxidizing agents.

Hazardous decomposition products

- May decompose upon heating to produce toxic vapors/gases.

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Trifluralin (5%)	1582-09-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • >5000 mg/kg; Inhalation-Rat LC50 • >4.8 mg/L 4 Hour(s); Skin-Rabbit LD50 • >5000 mg/kg; Irritation: Eye-Species unspecified • Mild irritation; Skin-Species unspecified • Essentially non-irritating

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
Skin corrosion/Irritation	OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	OSHA HCS 2012 • Classification criteria not met
Skin sensitization	OSHA HCS 2012 • Skin Sensitizer 1
Respiratory sensitization	OSHA HCS 2012 • Respiratory Sensitizer 1A
Aspiration Hazard	OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Classification criteria not met

Toxicity for Reproduction	OSHA HCS 2012 • Classification criteria not met
STOT-SE	OSHA HCS 2012 • Classification criteria not met
STOT-RE	OSHA HCS 2012 • Classification criteria not met

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause allergy or asthma symptoms or breathing difficulties if inhaled due to peanut hulls.

Chronic (Delayed)

- Repeated or prolonged inhalation of dust may cause respiratory irritation.

Skin

Acute (Immediate)

- May cause an allergic reaction in individuals with a sensitivity to Trifluralin. Exposure to dust may cause mechanical irritation.

Chronic (Delayed)

- No data available.

Eye

Acute (Immediate)

- Exposure to dust may cause mechanical irritation.

Chronic (Delayed)

- No data available

Ingestion

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- No data available

Other

Chronic (Delayed)

- No data available.

Mutagenic Effects

- Not classified.

Carcinogenic Effects

- Not classified.

Reproductive Effects

- Not classified.

Section 12 - Ecological Information

Toxicity

		Components
Trifluralin (5%)	1582-09-8	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow Trout</i> 0.088 mg/L [Acute] 96 Hour(s) LC50 <i>Bluegill sunfish</i> 0.089 mg/L [Acute] 96 Hour(s) LC50 <i>Minnow</i> >0.32 mg/L [Acute] 48 Day(s) NOEC <i>Rainbow trout</i> 0.00114 mg/L [Chronic] Aquatic Toxicity-Crustacea: 21 Day(s) NOEC <i>Daphnia magna</i> 0.0507 mg/L [Chronic] 48 Hour(s) EC50 <i>Daphnia magna</i> 0.245 mg/L [Acute] Aquatic Toxicity-Algae and Other Aquatic Plant(s): 72 Hour(s) ErC50 <i>Green algae</i> 0.0532 mg/L [Acute]

Persistence and degradability

- No data available

Bioaccumulative potential

- No data available

Mobility in Soil

- No data available

Other adverse effects

Potential Environmental Effects

- This pesticide is extremely toxic to freshwater, marine and estuarine fish, and aquatic invertebrates including shrimp and oyster.

Section 13 - Disposal Considerations

Waste treatment methods

- Product waste** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Packaging waste** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	RQ = Trifluralin 10 lbs.
IMO/IMDG	UN3077	Packaging 5 kg. or greater: Environmentally hazardous substance, solid, n.o.s. (Trifluralin)	9	III	Marine Pollutant
IATA/ICAO	UN3077	Packaging 5 kg. or greater: Environmentally hazardous substance, solid, n.o.s. (Trifluralin)	9	III	Acute Aquatic Toxicity

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Other information

- DOT** • Environmental hazards: RQ = (Trifluralin 10 lbs.)
- IMO/IMDG** • No data available
- IATA/ICAO** • No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Chronic, SARA Title III Section 313

FIFRA – Pesticide Labeling

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. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION

Precautionary Statements • KEEP OUT OF REACH OF CHILDREN.

Hazards to Humans and Domestic Animals

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear long-sleeved shirt and long pants, socks and shoes. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

First Aid •

IF 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 further treatment advice.

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

IF 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.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth to mouth if possible. Call poison control center or doctor for treatment advice.

Environmental Hazards •

This pesticide is extremely toxic to freshwater marine, and estuarine fish and aquatic invertebrates including shrimp and oyster. 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 apply in a manner that will directly expose canals, lakes, streams, ponds, marshes or estuaries to aerial drift. Do not contaminate water when disposing of equipment washwaters.

Inventory		
Component	CAS	TSCA
Trifluralin	1582-09-8	No

United States**Environment****U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• Trifluralin	1582-09-8
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U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Trifluralin	1582-09-8	10 lb final RQ; 4.54 kg final RQ
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U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Trifluralin	1582-09-8	1.0 % Supplier notification limit
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U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Trifluralin	1582-09-8	100 lb RT
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Section 16 - Other Information**Revision Date**

- 29/November/2016

Last Revision Date

- 29/November/2016

Preparation Date

- 29/November/2016

Disclaimer/Statement of Liability

- The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.