

SECTION 1: Identification

1.1. Identification

Product form	: Mixture
Trade name	: Howard Johnson's Trifluralin 5G, Pennington Seed Trifluralin 5G
Product code	: FertCDSSRsp
Synonyms	: EPA Reg. No.: 19713-689-32802, FertCDSSRsp

1.2. Recommended use and restrictions on use

Recommended use	: Herbicide for lawns and turf.
Restrictions on use	: Keep out of reach of children. Avoid contact with eyes, skin and clothing. Avoid breathing dust.

1.3. Supplier

Howard Johnson's Enterprises, Inc.
9675 S. 60th Street
Franklin, WI 53132 - United States
www.hjefertilizer.com
(414) 394-3590 - 8:30am - 5:00pm CST

1.4. Emergency telephone number

Emergency number	: 1-800-424-9300 - CHEMTREC - Transportation and Non-Transportation related emergencies 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Respiratory sensitization Category 1A	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
Skin sensitization, Category 1	May cause an allergic skin reaction
Combustible Dust	May form combustible dust concentrations in air

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



GHS08

Signal word (GHS US)	: Danger
Hazard statements (GHS US)	: May form combustible dust concentrations in air May cause an allergic skin reaction May cause an allergy or asthma symptoms or breathing difficulties if inhaled
Precautionary statements (GHS US)	: Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear In case of inadequate ventilation, wear respiratory protection. If on skin: Wash with plenty of water. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If skin irritation or rash occurs: Get medical advice/attention. If experiencing respiratory symptoms: Call a poison center or a doctor. Wash contaminated clothing before reuse. Dispose of contents/container to in accordance with local/regional/national/international regulations.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification	: This pesticide is extremely toxic to freshwater marine, and estuarine fish and aquatic invertebrates including shrimp and oyster. Under United States Regulations (29 CFR
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1910.1200 - Hazard Communication Standard), this product is considered hazardous.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Trifluralin	(CAS-No.) 1582-09-8	5
Peanut hulls	(CAS-No.) N/A	> 5
Non-hazardous and/or does not meet criteria for classification	(CAS-No.) N/A	Balance

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Call a poison center/doctor/physician if you feel unwell.
- First-aid measures after inhalation : IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : IF ON SKIN: Wash with plenty of soap and water. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : 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 and attention.
- First-aid measures after ingestion : IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after inhalation : May cause respiratory irritation. May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
- Symptoms/effects after skin contact : May cause an allergic skin reaction.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Use extinguishing agent suitable for surrounding fire.
- Unsuitable extinguishing media : Avoid heavy hose streams.

5.2. Specific hazards arising from the chemical

- Explosion hazard : Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
- 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.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Combustible dust - use low-pressure medium fog streams to avoid dust clouds. Ventilate closed spaces before entering. Eliminate ignition sources. Move containers away from the fire area if this can be done without risk.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Avoid contact with skin, eyes and clothing. Avoid dust formation and breathing dust. Wear suitable protective equipment.
- Emergency procedures : No flames, no sparks. Eliminate all sources of ignition. Evacuate unnecessary personnel. Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

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6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: Exposure controls/personal protection.
- Emergency procedures : Contain spill and monitor for excessive dust accumulation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate closed spaces before entering. Turn off electric power to area. As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. Evacuate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Sweep or scoop spills, dispose of any unusable material in approved landfill. 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. Non-sparking tools should be used. Use appropriate PPE.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid dust formation. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Provide local exhaust or general room ventilation. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Keep only in original container. Store in a well-ventilated place. Keep cool.
- Incompatible materials : Heat, sparks, open flame. Strong acids. Strong bases. Strong oxidizers. Strong oxidizers. Strong acids. Strong bases.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

- Appropriate engineering controls : 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. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear protective gloves

Eye protection:

Safety glasses

Skin and body protection:

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

Respiratory protection:

In case of insufficient ventilation, use NIOSH approved respiratory protection.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Variable colored granules
Color	: Variable
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Bulk density	: 45 - 80 lb/ft ³
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: Combustible dust
Oxidizing properties	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. 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.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. May form combustible dust concentrations in the air. Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid dust formation. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Heat, sparks, open flame. Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Trifluralin (1582-09-8)	
LD50 oral rat	1930 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 0.7 mg/l/4h

GHS-US Properties	Classification
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitization	May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cells mutagen	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicant (single exposure)	Not classified
Specific target organ toxicant (repeated exposure)	Not classified
Aspiration hazard	Not classified

Potential health effects

Inhalation

Acute : May cause allergy or asthma symptoms or breathing difficulties if inhaled due to peanut hulls. Exposure to dust may cause nasal and respiratory irritation.

Chronic : Repeated or prolonged inhalation of dust may cause respiratory irritation.

Skin

Acute : May cause an allergic reaction in individuals with a sensitivity to Trifluralin. May cause mild mechanical irritation.

Eye

Acute : Exposure may cause mechanical eye irritation.

Ingestion

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

Mutagenicity : Not classified.

Carcinogenicity : Not classified.

Reproductive Effects : Not classified.

SECTION 12: Ecological information

12.1. Toxicity

Trifluralin (1582-09-8)	
LC50 Acute fish 1	0.089 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
LC50 Acute fish 2	0.088 mg/l (Exposure time: 96 h - Species: Rainbow trout)
EC50 Acute crustacea 1	0.245 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 1	(Exposure time: 48 h - Species: Daphnia magna [Static])
NOEC Chronic fish 1	0.00114 mg/l (Exposure time: 48 d - Species: Rainbow trout)
NOEC Chronic crustacea 1	0.0507 mg/l (Exposure time: 21 d - Species: Daphnia magna)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

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Ecological Fate	This pesticide is extremely toxic to fish, aquatic invertebrates including oysters and shrimp.
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SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

SECTION 14: Transport information

	UN number	Proper Shipping Name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN3077	Packaging greater than 200 lbs.: Environmentally hazardous substance, solid, n.o.s. (Trifluralin)	9	III	RQ = Trifluralin = 10 lbs.
IMDG	UN3077	Packaging greater than 5 kg: Environmentally hazardous substance, solid, n.o.s (Trifluralin)	9	III	Marine pollutant
IATA	UN3077	Packaging greater than 5 kg: Environmentally hazardous substance, solid, n.o.s (Trifluralin)	9	III	Acute aquatic toxicity

SECTION 15: Regulatory information

15.1. US Federal regulations

Trifluralin (1582-09-8)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	10 lb
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SARA Section 313 - Emission Reporting	1 %
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FIFRA Labelling

EPA Registration Number	19713-689-32802
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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.

FIFRA Signal word	Caution
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FIFRA Precautionary Statement	KEEP OUT OF REACH OF CHILDREN.
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FIFRA Hazards to Humans and Domestic Animals	Harmful if inhaled. Causes moderate eye irritation. Harmful if swallowed. Avoid breathing dust. Avoid contact with skin, eyes, or clothing. Remove and wash contaminated clothing/PPE before reuse. Wear protective eyewear, long-sleeved shirt, long pants, and socks and shoes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
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FIFRA First Aid	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. 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 treatment advice. If swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. 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.
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FIFRA 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.
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15.2. US State regulations

No additional information available

SECTION 16: Other information

Date of issue : 24 September 2019

SDS US (GHS HazCom 2012) - CGP

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