

SAFETY DATA SHEET



Revision date 17-May-2021

Revision Number 1

1. Identification

Product identifier

Product Name Trifluralin 10G

Other means of identification

Product Code(s) 42750-34

UN/ID no. UN3077

Synonyms None

Registration Number(s) 42750-34

Recommended use of the chemical and restrictions on use

Recommended use Herbicide

Restrictions on use Follow label instructions

Details of the supplier of the safety data sheet

Company Address

ALBAUGH LLC
1525 NE 36th St,
Ankeny, IA 50211

Emergency telephone number

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call
CHEMTREC Day or Night

- Within USA and Canada: 1-800-424-9300
- Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. Hazard(s) identification

Classification

| | |
|---|------------|
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
|---|------------|

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Hazard statements

Harmful if inhaled
 May form combustible dust concentrations in air

**Appearance** granules**Physical state** Solid**Odor** No data available**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Call a POISON CENTER or doctor if you feel unwell

Other information

May be harmful if swallowed. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

| Chemical name | CAS No | Weight-% | Active Ingredient |
|---------------|-----------|-------------|-------------------|
| Bentonite | 1302-78-9 | 87.15-92.55 | |
| Trifluralin | 1582-09-8 | 9.5-10.5 | X |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures**Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance.

Inhalation

If breathing has stopped, give artificial respiration. Get medical attention immediately.
 Remove to fresh air. If symptoms persist, call a physician.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.
 Consult a physician.

Skin contact

Wash skin with soap and water.

| | |
|---|--|
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention. |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. See section 8 for more information. |

Most important symptoms and effects, both acute and delayed

Symptoms Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | No data available. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

| | |
|-----------------------------|--|
| Personal precautions | Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required. |
| Other information | Refer to protective measures listed in Sections 7 and 8. |

Methods and material for containment and cleaning up

| | |
|--------------------------------|---|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. |

7. Handling and storage**Precautions for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid generation of dust. Ensure adequate ventilation. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|------------------------|---|----------|-------|
| Bentonite 1302-78-9 | TWA: 1 mg/m ³ respirable particulate matter | - | - |

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid
Appearance granules
Color Amber
Odor No data available
Odor threshold No data available

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|-------------------------------------|-------------------------|
| pH | 4.3 5.3 | |
| Melting point / freezing point | No data available | |
| Boiling point / boiling range | No data available | |
| Flash point | No data available | |
| Evaporation rate | No data available | |
| Flammability (solid, gas) | No data available | |
| Flammability Limit in Air | | |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | 6.1 mPa (25°C) (Trifluralin) | |
| Vapor density | No data available | |
| Relative density | No data available | |
| Water solubility | No data available | |
| Solubility(ies) | Dispersible in water | |
| Partition coefficient | log Pow = 4.83 (20°C) (Trifluralin) | |
| Autoignition temperature | No data available | |
| Decomposition temperature | | |
| Kinematic viscosity | No data available cSt | |
| Dynamic viscosity | No data available | |
| <u>Other information</u> | | |
| Explosive properties | No data available | |
| Oxidizing properties | No data available | |
| Softening point | No data available | |
| Molecular weight | No data available | |
| VOC Content (%) | No data available | |
| Liquid Density | 1.15-1.21* | |
| Bulk density | No data available | |

*Listed density is an approximate value and does not necessarily represent that of a specific batch

10. Stability and reactivity

| | |
|------------------------------------|---|
| Reactivity | No data available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Excessive heat. |
| Incompatible materials | None known based on information supplied. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|--------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components). |
| Eye contact | Specific test data for the substance or mixture is not available. |
| Skin contact | Specific test data for the substance or mixture is not available. |

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

Oral LD50 > 5,000 mg/kg

Dermal LD50 > 5,050 mg/kg

Inhalation LC50 > 2.65 mg/l

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------|--|--|--------------------------------------|
| Bentonite 1302-78-9 | > 5000 mg/kg (Rat) | - | - |
| Trifluralin 1582-09-8 | = 2517 mg/kg (Rat) = 1930 mg/kg (Rat) | > 5000 mg/kg (Rat) > 5 g/kg (Rat) | = 2800 mg/m ³ (Rat) 1 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No data available.

Serious eye damage/eye irritation No data available.

Respiratory or skin sensitization No data available.

Germ cell mutagenicity No data available.

Carcinogenicity No data available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|--------------------------|-------|---------|-----|------|
| Trifluralin 1582-09-8 | - | Group 3 | - | - |

Legend

IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity No data available.

STOT - single exposure No data available.

STOT - repeated exposure No data available.

Aspiration hazard No data available.

Other adverse effects No data available.

Interactive effects No data available.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|--------------------------|----------------------|--|----------------------------|--|
| Bentonite 1302-78-9 | - | LC50: =19000mg/L (96h, Oncorhynchus mykiss) LC50: 8.0 - 19.0g/L (96h, Salmo gairdneri) | - | - |
| Trifluralin 1582-09-8 | - | LC50: 0.083 - 0.134mg/L (96h, Pimephales promelas) LC50: =0.099mg/L (96h, Pimephales promelas) LC50: 0.0072 - 0.014mg/L (96h, Oncorhynchus mykiss) LC50: 0.0168 - 0.0199mg/L (96h, Lepomis macrochirus) LC50: 0.036 - 0.051mg/L (96h, Cyprinus carpio) | - | EC50: 0.32 - 1mg/L (48h, Daphnia magna) EC50: 0.16 - 0.36mg/L (48h, Daphnia pulex) |

| | |
|--------------------------------------|------------------------------------|
| Persistence and degradability | No data available. |
| Bioaccumulation | There is no data for this product. |
| Other adverse effects | No data available. |

13. Disposal considerations

Waste treatment methods

| | |
|--|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated packaging | Do not reuse empty containers. |

14. Transport information

| | |
|-----------------------------------|---|
| <u>DOT</u> | Not regulated |
| Notes | 100 pounds and less: Not regulated by DOT. 100 pounds and greater: Environmentally hazardous substance, solid, n.o.s. (Trifluralin) |
| UN/ID no. | UN3077 |
| Transport hazard class(es) | 9 |
| Packing group | III |
| Reportable Quantity (RQ) | Trifluralin: RQ kg=43.40 |
| <u>TDG</u> | Not regulated |
| <u>MEX</u> | Not applicable |
| <u>ICAO (air)</u> | Not regulated |
| <u>IATA</u> | Not applicable |
| <u>IMDG</u> | Not regulated |
| <u>RID</u> | Not applicable |

ADR Not applicable

ADN Not applicable

15. Regulatory information

U.S. EPA Label Information

EPA Pesticide Registration Number 42750-34

EPA Pesticide Label Caution. Causes moderate eye irritation.

International Inventories

TSCA Does not comply
DSL/NDSL Does not comply
EINECS/ELINCS Does not comply
ENCS Does not comply
IECSC Does not comply
KECL Does not comply
PICCS Does not comply
AICS Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name | SARA 313 - Threshold Values % |
|-------------------------|-------------------------------|
| Trifluralin - 1582-09-8 | 1.0 |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|--------------------------|--------------------------|------------------------------------|
| Trifluralin 1582-09-8 | 10 lb | - |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------|------------|---------------|--------------|
| Trifluralin 1582-09-8 | X | X | X |

16. Other information

| | | | | |
|-----------------------------------|----------------------------------|-----------------------|---------------------------|---|
| NFPA | Health hazards 2 | Flammability 1 | Instability 0 | Physical and chemical properties - |
| HMIS | Health hazards 2 * | Flammability 0 | Physical hazards 0 | Personal protection X |
| <i>Chronic Hazard Star Legend</i> | <i>* = Chronic Health Hazard</i> | | | |

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 17-May-2021
Revision Note No data available.

Disclaimer

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others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

End of Safety Data Sheet