

SAFETY DATA SHEET



SENCOR® 75% TURF HERBICIDE

Version 4.0 / USA
10200007121

1/11
Revision Date: 01/04/2022
Print Date: 01/05/2022

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

| | |
|----------------------|----------------------------|
| Trade name | SENCOR® 75% TURF HERBICIDE |
| Product code (UVP) | 04399641 |
| SDS Number | 102000007121 |
| EPA Registration No. | 101563-129 |

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

| | |
|-------------------------|--|
| Use | Herbicide |
| Restrictions on use | See product label for restrictions. |
| Information on supplier | |
| Supplier | Environmental Science U.S. LLC 5000 Centregreen Way, Suite 400 Cary, NC 27513 USA |

Emergency telephone no.

| | |
|---|----------------|
| Emergency Telephone Number (24hr/ 7 days) | 1-800-424-9300 |
| Product Information Telephone Number | 1-800-331-2867 |

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Acute toxicity(Oral, Inhalation): Category 4

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements

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Harmful if swallowed.
Harmful if inhaled.

Precautionary statements

Wash thoroughly after handling.
Avoid breathing dust.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
Rinse mouth.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.
Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Concentration % by weight |
|--------------------------|------------|---------------------------|
| Metribuzin | 21087-64-9 | 75.0 |

SECTION 4: FIRST AID MEASURES

Description of first aid measures

| | |
|----------------|---|
| General advice | When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment. |
| Inhalation | Move 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 physician or poison control center immediately. |
| Skin contact | Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately. |
| Eye contact | 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 physician or poison control center immediately. |
| Ingestion | Call a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Rinse out mouth and give water in small sips to drink. Never give anything by mouth to an unconscious person. Do not leave victim unattended. |

Most important symptoms and effects, both acute and delayed

| | |
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| Symptoms | Breathing difficulties, Sedation |
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Indication of any immediate medical attention and special treatment needed

| | |
|------------------|--|
| Treatment | Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. |
|------------------|--|

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

| | |
|-----------------|---------------------|
| Suitable | Water, Dry chemical |
|-----------------|---------------------|

| | |
|-------------------|-----------------------|
| Unsuitable | High volume water jet |
|-------------------|-----------------------|

| | |
|--|---|
| Special hazards arising from the substance or mixture | Dangerous gases are evolved in the event of a fire. |
|--|---|

Advice for firefighters

| | |
|--|--|
| Special protective equipment for firefighters | In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing. |
|--|--|

| | |
|----------------------------|--|
| Further information | Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. |
|----------------------------|--|

| | |
|--------------------|----------------|
| Flash point | Not applicable |
|--------------------|----------------|

| | |
|----------------------------------|-------------------|
| Auto-ignition temperature | No data available |
|----------------------------------|-------------------|

| | |
|------------------------------|----------------|
| Lower explosion limit | Not applicable |
|------------------------------|----------------|

| | |
|------------------------------|----------------|
| Upper explosion limit | Not applicable |
|------------------------------|----------------|

| | |
|--------------------|---|
| Explosivity | Dust may form explosive mixture in air. |
|--------------------|---|

| | |
|-----------------------------|-------------------|
| Dust explosion class | No data available |
|-----------------------------|-------------------|

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| | |
|--------------------|--|
| Precautions | Avoid dust formation. Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. |
|--------------------|--|

Methods and materials for containment and cleaning up

| | |
|--------------------------------|--|
| Methods for cleaning up | Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations. Contaminated soil may have to be removed and disposed. |
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| | |
|------------------------------------|---|
| Additional advice | Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants. |
| Reference to other sections | Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13. |

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Advice on protection against fire and explosion Keep away from heat and sources of ignition. Avoid dust formation by friction. Dust may form explosive mixture in air.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove contaminated clothing immediately and dispose of safely. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|------------|------------|----------------------|---------|-----------|
| Metribuzin | 21087-64-9 | 5 mg/m3 (TWA) | 1989 | OSHA Z1A |
| Metribuzin | 21087-64-9 | 5 mg/m3 (TWA PEL) | 09 2006 | US CA OEL |
| Metribuzin | 21087-64-9 | 5 mg/m3 (TWA) | 2008 | ACGIH |
| Metribuzin | 21087-64-9 | 5 mg/m3 (REL) | 2005 | NIOSH |
| Metribuzin | 21087-64-9 | 5 mg/m3 (TWA) | 06 2008 | TN OEL |
| Metribuzin | 21087-64-9 | 0.36 mg/m3 | | OES BCS* |

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| | | | | |
|--|--|----------|--|--|
| | | (SK-SEN) | | |
|--|--|----------|--|--|

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

| | |
|------------------------------------|--|
| Respiratory protection | When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations. |
| Hand protection | Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton) |
| Eye protection | Safety glasses with side-shields |
| Skin and body protection | Wear long-sleeved shirt and long pants and shoes plus socks. |
| General protective measures | Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|---|----------------------------|
| Form | water-dispersible granules |
| Colour | grey-beige |
| Odor | musty |
| Odour Threshold | No data available |
| pH | No data available |
| Melting point/range | Not applicable |
| Boiling Point | Not applicable |
| Flash point | Not applicable |
| Flammability | No data available |
| Auto-ignition temperature | No data available |
| Minimum ignition energy | No data available |
| Self-accelarating decomposition temperature (SADT) | No data available |
| Upper explosion limit | Not applicable |

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| | |
|---|---|
| Lower explosion limit | Not applicable |
| Vapor Pressure | No data available |
| Evaporation rate | Not applicable |
| Relative vapour density | No data available |
| Relative density | No data available |
| Density | No data available |
| Water solubility | dispersible |
| Partition coefficient: n-octanol/water | Metribuzin: log Pow: 1.6 |
| Viscosity, dynamic | No data available |
| Viscosity, kinematic | No data available |
| Explosivity | Dust may form explosive mixture in air. |

SECTION 10: STABILITY AND REACTIVITY

| | |
|---|--|
| Reactivity | Stable under normal conditions. |
| Chemical stability | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | Sustained temperatures above 37.8 °C (100 °F). |
| Incompatible materials | Strong bases, Ketones, Aldehydes |
| Hazardous decomposition products | No decomposition products expected under normal conditions of use. |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|--------------------------|---|
| Exposure routes | Ingestion, Inhalation, Skin Absorption, Eye contact |
| Immediate Effects | |
| Eye | Moderate eye irritation. |
| Skin | Harmful if absorbed through skin. |
| Ingestion | Harmful if swallowed. |

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Inhalation Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (male Rat) 2,365 mg/kg
LD50 (female Rat) 1,449 mg/kg

Acute inhalation toxicity LC50 (male/female combined Rat) > 4.84 mg/l
Exposure time: 4 h
Determined in the form of dust.

Acute dermal toxicity LD50 (male/female combined Rat) > 2,000 mg/kg
LD50 (male/female combined Rabbit) > 5,000 mg/kg

Skin corrosion/irritation Mild skin irritation. (Rabbit)

Serious eye damage/eye irritation Moderate eye irritation. (Rabbit)

Respiratory or skin sensitisation Skin: Non-sensitizing. (Guinea pig)

Assessment STOT Specific target organ toxicity – single exposure

Metribuzin: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Metribuzin caused specific target organ toxicity in experimental animal studies in the following organ(s):
Liver, Kidney.

Assessment mutagenicity

Metribuzin was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Metribuzin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

Metribuzin 21087-64-9 Group A4

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Metribuzin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Metribuzin is related to parental toxicity.

Assessment developmental toxicity

Metribuzin caused developmental toxicity only at dose levels toxic to the dams. The developmental

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effects seen with Metribuzin are related to maternal toxicity.

Aspiration hazard

Based on available data, the classification criteria are not met.

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

| | |
|---|---|
| Toxicity to fish | LC50 (Oncorhynchus mykiss (rainbow trout)) 74.6 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metribuzin. |
| Toxicity to aquatic invertebrates | LC50 (Daphnia magna (Water flea)) 49.6 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient metribuzin. |
| Toxicity to aquatic plants | EC50 (Scenedesmus quadricauda (Green algae)) 0.022 mg/l The value mentioned relates to the active ingredient metribuzin. |
| Toxicity to bacteria | (activated sludge) 761 mg/l The value mentioned relates to the active ingredient metribuzin. |
| Biodegradability | Metribuzin: Not rapidly biodegradable |
| Koc | Metribuzin: Koc: 24 - 106 |
| Bioaccumulation | Metribuzin: Does not bioaccumulate. |
| Mobility in soil | Metribuzin: Mobile in soils |
| Results of PBT and vPvB assessment | |
| PBT and vPvB assessment | Metribuzin: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB). |
| Environmental precautions | Apply this product as specified on the label. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor runoff or drift. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. |

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

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| | |
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| Product | Follow container label instructions for disposal of wastes generated during use in compliance with the product label. Dispose in accordance with all local, state/provincial and federal regulations. |
| Contaminated packaging | Follow advice on product label and/or leaflet. Do not re-use empty containers. Triple rinse containers. Puncture container to avoid re-use. Consult state and local regulations regarding the proper disposal of container. |
| RCRA Information | Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply. |

SECTION 14: TRANSPORT INFORMATION

| | |
|----------------------|---|
| 49CFR | Not dangerous goods / not hazardous material |
| IMDG | |
| UN number | 3077 |
| Class | 9 |
| Packaging group | III |
| Marine pollutant | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METRIBUZIN MIXTURE) |

| | |
|--------------------------|--|
| IATA | |
| UN number | 3077 |
| Class | 9 |
| Packaging group | III |
| Environm. Hazardous Mark | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METRIBUZIN MIXTURE) |

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

| | |
|-------------------------|---|
| Freight Classification: | Fertilizing Compounds, N.O.I., Dry, having a density of equal to or greater than 20 lbs. per cubic foot |
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SECTION 15: REGULATORY INFORMATION

EPA Registration No. 101563-129

US Federal Regulations

TSCA list

| | |
|--|-----------|
| Kaolin | 1332-58-7 |
| Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt | 9084-06-4 |
| Sodium aluminium silicate | 1344-00-9 |

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

Yes

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| | | |
|---------------------------------|------------|---------------|
| Crystalline quartz (respirable) | 14808-60-7 | Carcinogenic. |
| Formaldehyde | 50-00-0 | Carcinogenic. |

US State Right-To-Know Ingredients

| | | |
|---------------------------|------------|------------|
| Metribuzin | 21087-64-9 | MN, NJ, RI |
| Kaolin | 1332-58-7 | MN, RI |
| Sodium aluminium silicate | 1344-00-9 | CA |

Environmental

CERCLA

None.

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:

This chemical is a pesticide product regulated by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

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Signal word: Caution!

Hazard statements: Harmful if swallowed or absorbed through skin.
Causes moderate eye irritation.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

| | |
|---------|---|
| 49CFR | Code of Federal Regulations, Title 49 |
| ACGIH | US. ACGIH Threshold Limit Values |
| ATE | Acute toxicity estimate |
| CAS-Nr. | Chemical Abstracts Service number |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| N.O.S. | Not otherwise specified |
| NTP | US. National Toxicology Program (NTP) Report on Carcinogens |
| OECD | Organization for Economic Co-operation and Development |
| TDG | Transportation of Dangerous Goods |
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 3 Instability - 1 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 3 Physical Hazard - 1 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: The following sections have been revised: Section 3: Composition / Information on Ingredients. Section 4: First Aid Measures. Section 11: Toxicological Information.

Revision Date: 01/04/2022

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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