

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 07 Aug 2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

Tritosulfuron

1.1. Catalog No.:

677470

1.2. Relevant identified uses of the substance or mixture Identified: Laboratory chemical uses: R&D

uses:

1.3. Uses advised against:

HPC Standards GmbH Am Wieseneck 7

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1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36 This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Skin sensitization (Category 1) Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1) Classification according to EU Directives 67/548/EEC or 1999/45/EC May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment in the aquatic environment.

2.2. Label elements

2.2.1. Pictogram



2.2 Label elements



Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram Signal word Warning Hazard statement(s) H317 May cause an allergic skin reaction. H410 Very toxic to aquatic life with long lasting effects. Precautionary statement(s) P273 Avoid release to the environment. P280 Wear protective gloves. P501 Dispose of contents/ container to an approved waste disposal plant. Supplemental Hazard Statements None According to European Directive 67/548/EEC as amended. Hazard symbol(s) R-phrase(s) R43 May cause sensitization by skin contact. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S-phrase(s) S-phrase(s) S36/37 Wear suitable protective clothing and gloves. S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets. Caution - substance not yet tested completely. 2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Formula : C13H9F6N5O4S Molecular Weight : 445,3 g/mol Component Concentration Tritosulfuron CAS-No. Index-No. 142469-14-5 613-271-00-0

3.1.1. Formula

C13H9F6N5O4S

3.1.2. Molecular Weight (g/mol)

445.30



3.1.3. CAS-No.

142469-14-5

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. 5.2 Special hazards arising from the substance or mixture Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen fluoride 5.3 Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary 5.4 Further information no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

6.2 Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13



7. HANDLING AND STORAGE

7.1 Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. 7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. 7.3 Specific end uses no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry Hands Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties a) Appearance Form: solid Colour: white
- b) Odour no data available
 c) Odour Threshold no data available
- d) pH no data availablee) Melting point/freezing
- point
- no data available
- f) Initial boiling point and
- boiling range
- no data available
- g) Flash point > 204 °C closed cup h) Evaporation rate no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower
- flammability or
- explosive limits
- no data available
- k) Vapour pressure no data available
- Napour density no data available
 Napour density no data available
 Relative density no data available
 Nater solubility slightly soluble
 Partition coefficient: noctanol/



water log Pow: 2,93 p) Autoignition témperature no data available q) Decomposition tëmperature no data available r) Viscosity no data available s) Explosive properties no data available t) Oxidizing properties no data available
 9.2 Other safety information no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity no data available 10.2 Chemical stability no data available 10.3 Possibility of hazardous reactions no data available 10.4 Conditions to avoid no data available 10.5 Incompatible materials no data available 10.6 Hazardous decomposition products Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity LD50 Oral - rat - > 4.700 mg/kgLC50 Inhalation - rat - 4 h - > 5.400 mg/m3LD50 Dermal - rat - > 2.000 mg/kgSkin corrosion/irritation Skin corrosion/irritation Skin - rabbit - No skin irritation Serious eye damage/eye irritation Eyes - rabbit - No eye irritation Respiratory or skin sensitization May cause allergic skin reaction. Germ cell mutagenicity Genotoxicity in vitro - Ames test - negative Carcinogenicity Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. Reproductive toxicity no data available Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Potential health effects Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. Additional Information



RTECS: Not available

12. ECOLOGICAL INFORMATION

12.1 Toxicity Toxicity to fish LC50 - Danio rerio (zebra fish) - 10 - 100 mg/l - 96,0 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia - > 100 mg/l - 48 h Toxicity to algae EC50 - Algae - 1,09 mg/l - 72 h 12.2 Persistence and degradability Biodegradability Biotic/Aerobic Result: - Not readily biodegradable. 12.3 Bioaccumulative potential no data available 12.4 Mobility in soil no data available 12.5 Results of PBT and vPvB assessment no data available 12.6 Other adverse effects Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging Dispose of as unused product

14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: 3077 IMDG: 3077 IATA: 3077 14.2 UN proper shipping name ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tritosulfuron) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tritosulfuron) IATA: Environmentally hazardous substance, solid, n.o.s. (Tritosulfuron) 14.3 Transport hazard class(es) ADR/RID: 9 IMDG: 9 IATA: 9 14.4 Packaging group ADR/RID: 1II IMDG: III IATA: III 14.5 Environmental hazards ADR/RID: yes IMDG Marine pollutant: yes IATA: yes 14.6 Special precautions for user Further information EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.



15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data available 15.2 Chemical Safety Assessment

no data available

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!