

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 16 Aug 2022

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

1.1. Product name:

Bromadiolone

1.1. Catalog No.:

675124

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

04451 Cunnersdorf Deutschland

Tel. +49 34291 3372-36 Fax. +49 34291 3372-39 contact@hpc-standards.com

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 Acute toxicity, Oral (Category 2), H300 Acute toxicity, Dermal (Category 2), H310 Acute aquatic toxicity (Category 1), H400 Classification according to EU Directives 67/548/EEC or 1999/45/EC T+, N Very toxic, Dangerous for the anvironment environment

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2 Label elements Labelling according Regulation (EC) No 1272/2008



Pictogram Signal word Danger Hazard statement(s) H300 + H310 Fatal if swallowed or in contact with skin H400 Very toxic to aquatic life. Precautionary statement(s) P264 Wash hands thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water. P310 Immediately call a POISON CENTER or doctor/ physician. Supplemental Hazard Statements none 2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Chemical characterization : Natural product Synonyms : Bromodiolone Formula : C30H23BrO4 Molecular Weight : 527,41 g/mol CAS-No. : 28772-56-7 EC-No. : 249-205-9 Hazardous ingredients according to Regulation (EC) No 1272/2008 Component Classification Concentration 3-[3-(4'-Bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2-benzopyrone CAS-No. EC-No. 28772-56-7 249-205-9 Acute Tox. 2; Aquatic Acute 1; H300 + H310, H400 &It;= 100 % Hazardous ingredients according to Directive 1999/45/EC Component Classification Concentration 3-[3-(4'-Bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2-benzopyrone CAS-No. EC-No. 28772-56-7 249-205-9 T+, N, R27/28 - R50 &It;= 100 %

3.1.1. Formula

C30H23BrO4



527.41

3.1.3. CAS-No.

28772-56-7

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 inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. 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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 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, Hydrogen bromide gas 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 Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.



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.Normal measures for preventive fire For precautions see section 2.2. 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 use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eves and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment Eye/face protection

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

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

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



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
a) Appearance Form: solid
b) Odour no data available
c) Odour Threshold no data available
d) pH no data available
e) Melting point/freezing
point
Melting point/range: 198 - 210 °C
f) Initial boiling point and
boiling range
no data available
g) Flash point no data available
h) Evapouration rate no data available
i) Flash point no data available
h) Evapouration rate no data available
j) Upper/lower
flammability (solid, gas) no data available
j) Upper/lower
flammability or
no data available explosive limits
k) Vapour pressure no data available
ii) Vapour density no data available
n) Water solubility no data available
n) Water solubility no data available
o) Partition coefficient: noctanol/
water
no data available
g) Decomposition
temperature
no data available
r) Viscosity no data available
s) Explosive properties no data available
y 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
Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions
no data available
10.4 Conditions to avoid
no data available
10.5 Incompatible materials
Strong bases
10.6 Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity no data available Skin corrosion/irritation no data available



Serious eye damage/eye irritation no data available Respiratory or skin sensitisation no data available Germ cell mutagenicity no data available 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 Additional Information RTECS: Not available To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 1,4 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0,24 mg/l - 48 h 12.2 Persistence and degradability no data available 12.3 Bioaccumulative potential no data available 12.4 Mobility in soil no data available 12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted 12.6 Other adverse effects Very toxic to aquatic life. no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. 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: 2811 IMDG: 2811 IATA: 2811 14.2 UN proper shipping name ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (3-[3-(4'-Bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1phenylpropyl]-4-hydroxy-2-benzopyrone) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (3-[3-(4'-Bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1phenylpropyl]-4-hydroxy-2-benzopyrone) IATA: Toxic solid, organic, n.o.s. (3-[3-(4'-Bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1phenylpropyl]-4-hydroxy-2-benzopyrone) IATA: Toxic solid, organic, n.o.s. (3-[3-(4'-Bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1phenylpropyl]-4-hydroxy-2-benzopyrone) IATA: Toxic solid, organic, n.o.s. (3-[3-(4'-Bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4hydroxy-2-benzopyrone) 14.3 Transport hazard class(es) ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1 14.4 Packaging group ADR/RID: 1 IMDG: 1 IATA: 1 14.5 Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no 14.6 Special precautions for user no data available

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 For this product a chemical safety assessment was not carried out

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!