

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 29 Aug 2024

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

### 1.1. Product name:

Halfenprox

### 1.1. Catalog No.:

691685

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 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 [EU-GHS/CLP]

Acute toxicity, Oral (Category 3)

Acute aquatic toxicity (Category 1)

Chronic aquatic toxicity (Category 1)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Toxic if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]  
Pictogram Signal word Danger  
Hazard statement(s)  
H301 Toxic if swallowed.  
H410 Very toxic to aquatic life with long lasting effects.  
Precautionary statement(s)  
P273 Avoid release to the environment.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
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-phrases(s)  
R25 Toxic if swallowed.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
S-phrases(s)  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S60 This material and its container must be disposed of as hazardous waste.  
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.  
2.3 Other hazards - none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances  
Synonyms : 2-(4-Bromodifluoromethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether  
Formula : C<sub>24</sub>H<sub>23</sub>BrF<sub>2</sub>O<sub>3</sub>  
Molecular Weight : 477,34 g/mol  
Component Concentration  
2-(4-Bromodifluoromethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether  
CAS-No.  
111872-58-3  
-

#### 3.1.1. Formula

C<sub>24</sub>H<sub>23</sub>BrF<sub>2</sub>O<sub>3</sub>

#### 3.1.2. Molecular Weight (g/mol)

477.33

### 3.1.3. CAS-No.

111872-58-3

## 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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### 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, 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

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

### 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

Soak up with inert absorbent material and dispose of as hazardous waste. 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 inhalation of vapour or mist.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8

## 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, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, liquid

Colour: light yellow

b) Odour no data available

c) Odour Threshold no data available

d) pH no data available

e) Melting point/freezing point

no data available

f) Initial boiling point and boiling range

291,2

## 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  
Strong oxidizing agents
- 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 - female - 159 mg/kg
  - LD50 Oral - rat - male - 132 mg/kg
  - LD50 Dermal - rat - > 2.000 mg/kg
  - Skin corrosion/irritation  
no data available
  - Serious eye damage/eye irritation  
no data available
  - Respiratory or skin sensitization  
no data available
  - Germ cell mutagenicity  
Not mutagenic in Ames Test.
  - 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  
Did not show teratogenic effects in animal experiments.
  - 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 Toxic if swallowed.
  - Skin May be harmful if absorbed through skin. May cause skin irritation.
  - Eyes May cause eye irritation.
  - Signs and Symptoms of Exposure  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
  - Additional Information  
Repeated dose toxicity - rat - male - inhalation (vapour) - No observed adverse effect level - 1,414 mg/kg
  - RTECS: Not available

## 12. ECOLOGICAL INFORMATION

- 12.1 Toxicity
  - Toxicity to fish LOEC - Cyprinus carpio (Carp) - 0,0035 mg/l - 96 h
  - Toxicity to daphnia and LC50 - Daphnia - 0,000031 mg/l - 48 h other aquatic invertebrates
  - Toxicity to algae EbC50 - Algae - > 0,2 mg/l - 72 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  
no data available  
12.6 Other adverse effects  
Very toxic to aquatic life with long lasting effects.  
no data available

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods  
Product  
Offer surplus and non-recyclable solutions to a licensed disposal company.  
Contaminated packaging  
Dispose of as unused product

### 14. TRANSPORT INFORMATION

14.1 UN number  
ADR/RID: 2810 IMDG: 2810 IATA: 2810  
14.2 UN proper shipping name  
ADR/RID: TOXIC LIQUID, ORGANIC, N.O.S. (2-(4-Bromodifluoromethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether)  
IMDG: TOXIC LIQUID, ORGANIC, N.O.S. (2-(4-Bromodifluoromethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether)  
IATA: Toxic liquid, organic, n.o.s. (2-(4-Bromodifluoromethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether)  
14.3 Transport hazard class(es)  
ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1  
14.4 Packaging group  
ADR/RID: III IMDG: III IATA: III  
14.5 Environmental hazards  
ADR/RID: yes IMDG Marine pollutant: yes 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  
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!