

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 28 Nov 2023

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

### 1.1. Product name:

1H,1H,2H,2H-Perfluorooctanesulfonic acid

### 1.1. Catalog No.:

677607

### 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

Classification (According to EU Regulation 1272/2008)  
Skin Corrosion (Category 1B)  
H314

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

GHS Hazard Statements  
H314  
H318  
Causes severe skin burns and eye damage.  
Causes serious eye damage.  
Danger

GHS Precautionary Statements

Signal Word

P261

P264

P280

P303/P361/P353

Avoid breathing dust/fume/gas/mist/vapours/spray

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305/P351/P338

P310

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Component

1H,1H,2H,2H-Perfluorooctanesulfonic acid

Classification

Skin Corr. 1A; H314

Concentration

<= 100 %

#### 3.1.1. Formula

C<sub>8</sub>H<sub>5</sub>F<sub>13</sub>O<sub>3</sub>S

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

428.17

#### 3.1.3. CAS-No.

27619-97-2

#### 4. FIRST AID MEASURES

##### 4.1 Description of First Aid Measures

###### General Advice

If medical attention is required, show this safety data sheet to the doctor.

###### If Inhaled

If inhaled, move person to fresh air. If not breathing, give artificial respiration and consult a physician.

###### In Case of Skin Contact

Wash affected area with soap and water. Consult a physician if any exposure symptoms are observed.

###### In Case of Eye Contact

Immediately rinse eyes with plenty of water for at least 15 minutes. Consult a physician.

###### If Swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Do NOT induce vomiting unless advised to do so by a physician or Poison Control Center. Seek medical attention.

##### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or section 11.

##### 4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

No data available.

#### 5. FIRE-FIGHTING MEASURES

##### 5.3 Advice for Firefighters

##### 5.1 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, Sulfur oxides, Hydrogen fluoride

Wear self contained breathing apparatus for fire fighting if necessary.

##### 5.4 Further Information

No data available.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust.

##### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

##### Method 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.

#### 7. HANDLING AND STORAGE

##### 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.

##### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

Storage conditions: -20°C Freezer, Under inert atmosphere

7.3 Specific End Uses

For scientific research and development only. Not for use in humans or animals.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control Parameters

Contains no components with established occupational exposure limits.

### 8.2 Exposure Controls

#### Appropriate Engineering Controls

A laboratory fumehood or other appropriate form of local exhaust ventilation should be used to avoid exposure.

#### Personal Protective Equipment

All recommendations below are advisory in nature and a risk assessment should be performed by the employer/end user prior to use of this product. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.

#### Eye/Face Protection

Safety goggles or face shield. All equipment should have been tested and approved under appropriate standards, such as NIOSH (US), CSA (Canada), or EN 166 (EU).

#### Skin Protection

Gloves should be used when handling this material.

#### Body Protection

Fire resistant (Nomex) lab coat or coveralls.

#### Respiratory Protection

Recommended respirators are NIOSH-approved N100 or CEN-approved FFP3 particulate respirators. These are to be only used as a backup to local exhaust ventilation or other engineering controls. If the respirator is the only means of protection, a full-face supplied air respirator must be used.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical and Chemical Properties

A) Appearance White to LightBrown Solid

B) Odour No data available

C) Odour Threshold No data available

D) pH No data available

E) Melting Point/Freezing Point >71°C (dec.)

F) Initial Boiling Point/Boiling Range No data available

G) Flash point No data available

H) Evaporation Rate No data available

I) Flammability (Solid/Gas) No data available

J) Upper/Lower Flammability/Explosive Limits No data available

K) Vapour Pressure No data available

L) Vapour Density No data available

M) Relative Density No data available

N) Solubility Acetone (Slightly), Chloroform (Slightly), DMSO (Slightly), Methanol

O) Partition Coefficient: n-octanol/water No data available

P) Auto-Ignition Temperature No data available

Q) Decomposition Temperature No data available

R) Viscosity No data available

S) Explosive Properties No data available

T) Oxidizing Properties No data available

9.2 Other Information no data available

## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity
  - 10.2 Chemical Stability
  - 10.3 Possibility of Hazardous Reactions
  - 10.4 Conditions to Avoid
  - 10.5 Incompatible Materials
  - 10.6 Hazardous Decomposition Products
- No data available.  
Stable under recommended storage conditions.  
No data available.  
No data available.  
Strong oxidizing agents.  
In the event of fire: See section 5. Other decomposition products: No data available.

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on Toxicological Effects
  - A) Acute Toxicity  
Oral LD50: No data available. Inhalation LC50: No data available.  
Dermal LD50: No data available.
  - B) Skin Corrosion/Irritation
  - C) Serious Eye Damage/Irritation
  - D) Respiratory or Skin Sensitization  
No data available  
Corrosive - causes skin and eye burns. May also cause respiratory tract damage.  
No data available
  - E) Germ Cell Mutagenicity
  - F) Carcinogenicity
  - G) Reproductive Toxicity/Teratogenicity
  - H) Single Target Organ Toxicity - Single Exposure
  - I) Single Target Organ Toxicity - Repeated Exposure
  - J) Aspiration Hazard
  - K) Potential Health Effects and Routes of Exposure
    - Inhalation  
No data available  
No data available  
No data available  
No data available  
No data available  
No data available  
May be harmful if inhaled. Material is extremely destructive to the mucous membranes and respiratory tract.  
May be harmful if swallowed.  
May be harmful if absorbed through skin. Causes skin burns.  
Causes severe eye burns and possible permanent eye damage.
    - Ingestion
      - Skin
      - Eyes
  - L) Signs and Symptoms of Exposure  
To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been thoroughly investigated.
  - M) Additional Information  
Not available.

## 12. ECOLOGICAL INFORMATION

- 12.1 Toxicity  
No data available.
- 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

No data available

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

A) Product

Product may be burned in an incinerator equipped with afterburner and scrubber. Excess and expired materials are to be offered to a licensed hazardous material disposal company. Ensure that all Federal and Local regulations regarding the disposal and destruction of this material are followed.

B) Contaminated Packaging

Dispose of as above.

C) Other Considerations

Product is not to be disposed of in sanitary sewers, storm sewers, or landfills.

### 14. TRANSPORT INFORMATION

14.1 UN Number

DOT (US): UN3261 IATA: UN3261 IMDG: UN3261 ADR/RID: UN3261

14.2 UN Proper Shipping Name

DOT (US)/IATA:

IMDG/ARD/RID:

Corrosive solid, acidic, organic, n.o.s. (3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctane-1-sulphonic Acid)  
CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctane-1-sulphonic Acid)

14.3 Transport Hazard Class(es)

DOT (US):8 IATA:8 IMDG: 8 ADR/RID: 8

14.4 Packing Group

DOT (US): III IATA: III IMDG: III ADR/RID: III

14.5 Environmental Hazards

DOT (US): None IATA: None IMDG: None ADR/RID: None

14.6 Special Precautions for User

None

### 15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of EU Regulation EC No. 1907/2006.

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

ECHA Status:

This product is not registered with the EU ECHA.

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!