HPC Standards GmbH
Am Wieseneck 7
04451 Cunnersdorf
Phone 0049 34291 3372-36
Fax 0049 34291 3372-39
www.hpc-standards.com
contact@hpc-standards.com

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 04 Nov 2024

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

1.1. Product name:

p-Toluenesulfonic acid monohydrate

1.1. Catalog No.:

687296

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

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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
Corrosive to Metals (Category 1), H290
Skin corrosion (Sub-category 1B), H314
Serious eye damage (Category 1), H318
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Long-term (chronic) aquatic hazard (Category 3), H412

2.2. Label elements

2.2.1. Pictogram

2.2.2.

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

Signal word Danger
Hazard statement(s)
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
Precautionary statement(s)
P234 Keep only in original packaging.
P260 Do not breathe dusts or mists.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements
none
Reduced Labeling (<= 125 ml)
Signal word Danger
Hazard statement(s)
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.
Precautionary statement(s)
P260 Do not breathe dusts or mists.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements
none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Formula : C7H8O3S.H2O
Molecular weight : 190,22 g/mol
CAS-No. : 6192-52-5
EC-No. : 203-180-0
Index-No. : 016-030-00-2

3.1.1. Formula

C7H10O4S

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3.1.2. Molecular Weight (g/mol)

190.22

3.1.3. CAS-No.

6192-52-5

4. FIRST AID MEASURES

4.1 Description of first-aid measures
General advice
First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
If inhaled
After inhalation: fresh air. Call in physician.
In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
In case of eye contact
After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
If swallowed
After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.
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
Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.
5.2 Special hazards arising from the substance or mixture
Carbon oxides
Sulfur oxides
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.
5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
5.4 Further information
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.
6.2 Environmental precautions
Do not let product enter drains.
6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Storage conditions
No metal containers.
Tightly closed. Dry.
Store under argon.
Storage class
Storage class (TRGS 510): 8A: Combustible, corrosive hazardous materials
7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Ingredients with workplace control parameters
8.2 Exposure controls
Personal protective equipment
Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles
Skin protection
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

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Body Protection
protective clothing
Respiratory protection
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
Recommended Filter type: Filter type P2
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.
These measures have to be properly documented.
Control of environmental exposure
Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
a) Physical state crystalline
b) Color white
c) Odor No data available
d) Melting
point/freezing point
Melting point/range: 56 °C
e) Initial boiling point
and boiling range
92 - 119 °C
f) Flammability (solid,
gas)
No data available
g) Upper/lower
flammability or
explosive limits
No data available
h) Flash point No data available
i) Autoignition
temperature
No data available
j) Decomposition
temperature
No data available
k) pH No data available
l) Viscosity Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
m) Water solubility No data available
n) Partition coefficient:
n-octanol/water
No data available
o) Vapor pressure No data available
p) Density No data available
Relative density No data available
q) Relative vapor
density
No data available
r) Particle
characteristics
No data available
s) Explosive properties Not classified as explosive.
t) Oxidizing properties none
9.2 Other safety information
No data available

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10. STABILITY AND REACTIVITY

10.1 Reactivity
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .
10.3 Possibility of hazardous reactions
Exothermic reaction with:
Generates dangerous gases or fumes in contact with:
Acids
Bases
strong oxidising agents
Acetic anhydride
with
Water
10.4 Conditions to avoid
no information available
10.5 Incompatible materials
Metals
10.6 Hazardous decomposition products
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - male and female - 1.410 mg/kg
(OECD Test Guideline 401)
Symptoms: Irritation symptoms in the respiratory tract., mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract
Dermal: No data available
Skin corrosion/irritation
Skin - Rabbit
Result: Corrosive - 4 h
(OECD Test Guideline 404)
Remarks: (anhydrous substance)
Serious eye damage/eye irritation
Eyes - Rabbit
Result: Corrosive - 30 s
Remarks: (anhydrous substance)
Causes serious eye damage.
Respiratory or skin sensitization
Maximization Test - Guinea pig
Result: negative
(Regulation (EC) No. 440/2008, Annex, B.6)
Germ cell mutagenicity
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster lung cells
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 473
Result: positive
Test Type: Chromosome aberration test in vitro
Test system: Other cell types
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 473
Result: positive
Test Type: Micronucleus test
Species: Mouse
Cell type: Red blood cells (erythrocytes)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative
Remarks: (in analogy to similar products)
Carcinogenicity

No data available
Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
May cause respiratory irritation. - Respiratory system
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
11.2 Additional Information
Endocrine disrupting properties
Product:
Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Repeated dose toxicity - Rat - male and female - Oral - 28 Days - NOAEL (No observed adverse effect level) - >= 500 mg/kg
burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Other dangerous properties can not be excluded.
Handle in accordance with good industrial hygiene and safety practice.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to fish static test LC50 - Leuciscus idus melanotus - > 500 mg/l - 96 h
(OECD Test Guideline 203)
Remarks: (anhydrous substance)
Toxicity to daphnia and other aquatic invertebrates
static test EC50 - Daphnia magna (Water flea) - > 103 mg/l - 48 h
(OECD Test Guideline 202)
Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata - 73 mg/l - 72 h
(OECD Test Guideline 201)
Remarks: (anhydrous substance)
The value is given in analogy to the following substances: toluene-4-sulphonic acidThe value is given in analogy to the following substances: benzenesulphonic acid
Toxicity to bacteria static test NOEC - activated sludge - 580 mg/l - 3 h
(OECD Test Guideline 209)
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
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
12.6 Endocrine disrupting properties
Product:
Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
12.7 Other adverse effects
Harmful effect due to pH shift.
Discharge into the environment must be avoided.

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13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 2585 IMDG: 2585 IATA: 2585
14.2 UN proper shipping name
ADR/RID: ARYLSULPHONIC ACIDS, SOLID
IMDG: ARYLSULPHONIC ACIDS, SOLID
IATA: Arylsulphonic acids, solid
14.3 Transport hazard class(es)
ADR/RID: 8 IMDG: 8 IATA: 8
14.4 Packaging group
ADR/RID: III IMDG: III IATA: III
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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations
Take note of Dir 94/33/EC on the protection of young people at work.
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!