



#### 1 - Product

Product Name **(1R)-(-)-10-CAMPHORSULFONIC ACID, 98%**  
Product Number 282146

#### 2 - Hazards Identification

**SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT**

Causes burns.

#### 3 - Composition/Information on Ingredients

Product Name CAS # EC no Annex I

Index Number

(-)-CAMPHOR-10-SULFONIC ACID 35963-20-3 252-817-9 None

Formula C<sub>10</sub>H<sub>16</sub>O<sub>4</sub>S

Molecular Weight 232.3 AMU

#### 4 - First Aid Measures

**AFTER INHALATION**

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**AFTER EYE CONTACT**

Assure adequate flushing of the eyes by separating the eyelids with fingers.

**AFTER INGESTION**

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### 5 - Fire Fighting Measures

**EXTINGUISHING MEDIA**

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

**SPECIAL RISKS**

Specific Hazard(s): Emits toxic fumes under fire conditions.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### 6 - Accidental Release Measures

**PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL**

Evacuate area.

**PROCEDURE(S) OF PERSONAL PRECAUTION(S)**

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

**METHODS FOR CLEANING UP**

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

**7 - Handling and Storage**

**HANDLING**

Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

**STORAGE**

Conditions of Storage: Keep tightly closed. Store in a cool dry place.

**SPECIAL REQUIREMENTS:** Hygroscopic.

**8 - Exposure Controls / Personal Protection**

**ENGINEERING CONTROLS**

Safety shower and eye bath. Use only in a chemical fume hood.

**GENERAL HYGIENE MEASURES**

Wash thoroughly after handling. Wash contaminated clothing before reuse. Discard contaminated shoes.

**PERSONAL PROTECTIVE EQUIPMENT**

Special Protective Measures: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Faceshield (8-inch minimum).

**9 - Physical and Chemical Properties**

Appearance Color: Faintly beige Form: Powder

Property Value At Temperature or Pressure

pH 1.2 - 1.4 Concentration: 20 g/l

BP/BP Range N/A MP/MP Range 200 °C

Flash Point N/A Flammability N/A

Autoignition Temp N/A Oxidizing Properties N/A

Explosive Properties N/A Explosion Limits N/A

Vapor Pressure N/A SG/Density N/A

Partition Coefficient N/A Viscosity N/A

Vapor Density N/A Saturated Vapor Conc. N/A

Evaporation Rate N/A Bulk Density N/A

Decomposition Temp. N/A

Solvent Content N/A Water Content N/A

Surface Tension N/A Conductivity N/A

Miscellaneous Data N/A Solubility N/A

## 10 - Stability and Reactivity

### **STABILITY**

Materials to Avoid: Strong oxidizing agents, Strong bases.

### **HAZARDOUS DECOMPOSITION PRODUCTS**

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Sulfur oxides.

## 11 - Toxicological Information

### **SIGNS AND SYMPTOMS OF EXPOSURE**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

### **ROUTE OF EXPOSURE**

Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin.

## 12 - Ecological Information

No data available.

## 13 - Disposal Considerations

### **SUBSTANCE DISPOSAL**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## 14 - Transport Information

### **RID/ADR**

UN#: 3261

Class: 8

PG: II

Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s.

### **IMDG**

UN#: 3261

Class: 8

PG: II

Proper Shipping Name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

Marine Pollutant: No

Severe Marine Pollutant: No

Technical Name: Required

IATA

UN#: 3261

Class: 8

PG: II

Proper Shipping Name: Corrosive solid, acidic,  
organic, n.o.s.

Inhalation Packing Group I: No

Technical Name: Required

#### 15 - Regulatory Information

**CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES**

**INDICATION OF DANGER: C**

Corrosive.

**R-PHRASES: 34**

Causes burns.

**S-PHRASES: 26-36/37/39-45**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Self-Classification

#### 16 - Other Information

For R&D use only. Not for drug, household or other uses.

<http://www.sparchem.com>