

# OTTO CHEMIE PVT LTD

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ISO 9001: 2015

## MATERIAL SAFETY DATA SHEET

### 1. Identification

#### 1.1 GHS Product identifier

Benzene sulphonyl chloride, 98%

Code B 1495

### 2. Hazard identification

#### 2.1 Classification of the substance or mixture

Acute toxicity - Oral, Category 4

Skin corrosion, Category 1A

Eye irritation, Category 2A

#### 2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word

Hazard statement(s)

Precautionary statement(s)

Prevention

Response

Storage

Disposal

2.3 Other hazards which do not result in classification  
none

Danger

H314 Causes severe skin burns and eye damage

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/2026 if you feel unwell.

P330 Rinse mouth.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P363 Wash contaminated clothing before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER/doctor/2026

P321 Specific treatment (see ... on this label).

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container to ...

### 3. Composition/information on ingredients

#### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Benzenesulfonyl Chloride	Benzenesulfonyl Chloride	98-09-9	none	100%

### 4. First-aid measures

#### 4.1 Description of necessary 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. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms/effects, acute and delayed

May be fatal if inhaled, swallowed or absorbed through skin. Contact may cause skin and eye burns. Irritating to eyes, skin and mucous membranes. INGESTION: May cause abdominal spasm and vomiting. (USCG, 1999)

4.3 Indication of immediate medical attention and special treatment needed, if necessary  
no data available

## 5. Fire-fighting measures

### 5.1 Extinguishing media

Suitable extinguishing media

Excerpt from ERG Guide 156 [Substances - Toxic and/or Corrosive (Combustible / Water-Sensitive)]: Note: Most foams will react with the material and release corrosive/toxic gases. SMALL FIRE: CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. LARGE FIRE: Water spray, fog or alcohol-resistant foam. FOR CHLOROSILANES, DO NOT USE WATER; use AFFF alcohol-resistant medium-expansion foam. Move containers from fire area if you can do it without risk. Use water spray or fog; do not use straight streams. FIRE INVOLVING TANKS OR CAR/TRAILER LOADS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. (ERG, 2016)

### 5.2 Specific hazards arising from the chemical

Special Hazards of Combustion Products: May contain highly toxic and irritating hydrogen chloride and oxides of chlorine and sulfur. Behavior in Fire: Cylinder may explode. Decomposes to produce highly toxic chlorine and sulfur compounds. Reacts with hot water to produce highly toxic and corrosive hydrochloric acid and benzenesulfonic acid. (USCG, 1999)

### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. 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. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. 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.

## 8. Exposure controls/personal protection

### 8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

### 8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

## 9. Physical and chemical properties

Physical state

clear liquid

Colour

COLORLESS, OILY LIQUID

Odour

no data available

Melting point/ freezing point

52\u00b0C(lit.)

Boiling point or initial boiling point and boiling range

252\u00b0C(lit.)

Flammability

no data available

Lower and upper explosion limit / flammability limit no data available  
Flash point 135\u00b0C(lit.)  
Auto-ignition temperature no data available  
Decomposition temperature no data available  
pH no data available  
Kinematic viscosity no data available  
Solubility In water:may decompose  
Partition coefficient n-octanol/water (log value) no data available  
Vapour pressure 0.04 mm Hg ( 20 \u00b0C)  
Density and/or relative density 1.384  
Relative vapour density no data available  
Particle characteristics no data available

## 10.Stability and reactivity

### 10.1Reactivity

no data available

### 10.2Chemical stability

STABLE TOWARD COLD WATER

### 10.3Possibility of hazardous reactions

BENZENESULFONYL CHLORIDE is incompatible with strong oxidizing agents and bases, including amines. Corrodes metals in the presence of water due to slow formation of hydrochloric acid and benzenesulfonic acid (USCG, 1999). May react vigorously or explosively if mixed with diisopropyl ether or other ethers in the presence of trace amounts of metal salts [J. Haz. Mat., 1981, 4, 291].

### 10.4Conditions to avoid

no data available

### 10.5Incompatible materials

IN ABSENCE OF DILUENT OR OTHER EFFECTIVE CONTROL OF REACTION RATE, /DIMETHYL/ SULFOXIDE REACTS VIOLENTLY OR EXPLOSIVELY WITH ... BENZENESULFONYL CHLORIDE ...

### 10.6Hazardous decomposition products

DECOMP 251-252 DEG C AT 760 MM HG

## 11.Toxicological information

### Acute toxicity

Oral: LD50 Mouse acute oral 0.4 to 3.2 g/kg /Benzenesulfonic acid/

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

## 12.Ecological information

### 12.1Toxicity

Toxicity to fish: LC50 Brown trout yearlings 3 mg/l/48 hr /Static bioassay

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

### 12.2Persistence and degradability

No data were located concerning the biodegradation of benzenesulfonyl chloride either in natural systems or in laboratory studies(SRC). Since benzenesulfonyl chloride rapidly hydrolyzes in water(1,SRC), biodegradation probably will not be an important process in the environment(SRC).

### 12.3Bioaccumulative potential

Since benzenesulfonyl chloride rapidly hydrolyzes in water(1), bioconcentration in aquatic organisms is not expected to be a significant process(SRC).

### 12.4Mobility in soil

Since benzenesulfonyl chloride rapidly hydrolyzes in water(1) and presumably in moist soil(SRC), adsorption to soil is not expected to be a significant process(SRC).

12.5 Other adverse effects  
no data available

13. Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information

14.1 UN Number

ADR/RID: UN2225

IMDG: UN2225

IATA: UN2225

14.2 UN Proper Shipping Name

ADR/RID: BENZENESULPHONYL CHLORIDE

IMDG: BENZENESULPHONYL CHLORIDE

IATA: BENZENESULPHONYL CHLORIDE

14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

14.4 Packing group, if applicable

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: no

IMDG: no

IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Benzenesulfonyl Chloride	Benzenesulfonyl Chloride	98-09-9	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.

#### Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.