

SAFETY DATA SHEET

Revision Date 10-Feb-2015

Revision Number 1

| 1. Identification | | | |
|--|--|--|--|
| Product Name | 4-Pentylbenzene-1-sulfonyl chloride | | |
| Cat No. : | BTB09810DA; BTB09810EA; BTB09810EB; BTB09810ZZ | | |
| Synonyms | No information available | | |
| Recommended Use | Laboratory chemicals. | | |
| Uses advised against Details of the supplier of the safety d | No Information available ety data sheet | | |
| Company Maybridge Thermo Fisher Scientific Bishop Meadow Rd Loughborough, Leicestershire, Great Bi LE115RG | Emergency Telephone Number For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11 Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No.US:001-800-424-9300 / Europe:001-703-527-3887 ritain | | |

2. Hazard(s) identification

Tel: 01509 231166

Website: www.maybridge.com

Classification This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/irritation Serious Eye Damage/Eye Irritation

Category 1 B Category 1

Label Elements

Signal Word Danger

Hazard Statements

Causes severe skin burns and eye damage



Precautionary Statements Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

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

Wash contaminated clothing before reuse

Eyes

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

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant Hazards not otherwise classified (HNOC)

Contact with water liberates toxic gas

3. Composition / information on ingredients

| Component | | CAS-No | Weight % | |
|---|---|---|----------|--|
| 4-Pentylbenzene-1-sulfonyl c | 4-Pentylbenzene-1-sulfonyl chloride | | 97 | |
| | 4. | First-aid measures | | |
| Eye Contact | Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. | | | |
| Skin Contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required. | | | |
| Inhalation | Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required. | | | |
| Ingestion | Do not induce vomiting. Call a physician immediately. | | | |
| Most important symptoms/effects | Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation | | | |
| Notes to Physician | Treat symptomatically | | | |
| 5. Fire-fighting measures | | | | |
| Suitable Extinguishing Media | Carbon dioxid | de (CO 2). Dry chemical. chemical foam. | | |
| Unsuitable Extinguishing Media | No informatio | n available | | |
| Flash Point Method - | No information available No information available | | | |
| Autoignition Temperature Explosion Limits | No informatio | n available | | |
| Upper Lower Sensitivity to Mechanical Impac | No data available No data available ct No information available | | | |

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Hydrogen chloride gas Carbon monoxide (CO) Carbon dioxide (CO₂) Chlorine Sulfur oxides

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

| NFPA Health 3 | Flammability 0 | Instability 0 | Physical hazards W | | |
|---|--|------------------|-----------------------|--|--|
| 6. Accidental release measures | | | | | |
| Personal Precautions Environmental Precautions | Ensure adequate ventilation. Use personal protective equipment. See Section 12 for additional ecological information. | | | | |

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Up

| | 7. Handling and storage |
|-------------------------------|---|
| Handling | Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation. |
| Storage | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area. Keep under nitrogen. |
| 8. E | Exposure controls / personal protection |
| Exposure Guidelines | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| Engineering Measures | Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. |
| Personal Protective Equipment | |
| Eye/face Protection | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. |
| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| Respiratory Protection | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |
| | 9. Physical and chemical properties |
| Physical State | Solid W/bite |

| | <u> </u> |
|----------------|--------------------------|
| Physical State | Solid |
| Appearance | White |
| Odor | No information available |
| Odor Threshold | No information available |
| рН | No information available |
| | |

| Melting Point/Range Boiling Point/Range Flash Point Evaporation Rate | 42 - 44 °C / 107.6 - 111.2 °F No information available No information available No information available |
|---|---|
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | No information available |
| Vapor Density | No information available |
| Relative Density | No information available |
| Solubility | No information available |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | No information available |
| Decomposition Temperature | No information available |
| Viscosity | No information available |
| Molecular Formula | C11 H15 CI O2 S |
| Molecular Weight | 246.76 |
| | |

| 10. Stability and reactivity | | | | | | |
|--|------------------|--|---------------------|---------------------|------|--------|
| Reactive Hazard | | Yes | | | | |
| Stability | | Moisture sensitive. | | | | |
| Conditions to Avoid | 1 | Incompatible prod | ucts. Exposure to r | moist air or water. | | |
| Incompatible Mater | ials | Bases, Strong oxid | dizing agents | | | |
| Hazardous Decomp | osition Products | ts Hydrogen chloride gas, Carbon monoxide (CO), Carbon dioxide (CO ₂), Chlorine, Sulfur oxides | | | | |
| Hazardous Polymer | ization | No information available. | | | | |
| Hazardous Reaction | าร | None under normal processing. | | | | |
| 11. Toxicological information | | | | | | |
| Acute Toxicity | | | | | | |
| Product Information Component Information | | No acute toxicity information is available for this product | | | | |
| Toxicologically Syn | | No information available | | | | |
| Products Delayed and immediate effects as well as chronic effects from short and long-term exposure | | | | | | |
| Irritation | | No information available | | | | |
| Sensitization | | No information available | | | | |
| Carcinogenicity | | The table below indicates whether each agency has listed any ingredient as a carcinogen. | | | | |
| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
| 4-Pentylbenzene-1-sul fonyl chloride | 73948-18-2 | Not listed Not listed Not listed Not listed Not listed | | | | |

| 4-Pentylbenzene-1-sul fonyl chloride | 73948-18-2 | Not listed | Not listed | Not listed | Not listed | Not listed |
|---|------------|---------------------------|------------|------------|------------|------------|
| Mutagenic Effects | | No information available | | | | |
| Reproductive Effect | S | No information available. | | | | |
| Developmental Effe | cts | No information ava | ailable. | | | |

| Teratogenicity | No information available. | | | |
|--|---|--|--|--|
| STOT - single exposure STOT - repeated exposure | None known None known | | | |
| Aspiration hazard | No information available | | | |
| Symptoms / effects,both acute and delayed | Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes | | | |
| Endocrine Disruptor Information | severe swelling, severe damage to the delicate tissue and danger of perforation No information available | | | |
| Other Adverse Effects | Effects The toxicological properties have not been fully investigated. | | | |
| | 12. Ecological information | | | |
| <u>Ecotoxicity</u> Do not empty into drains. | | | | |
| Persistence and Degradability Bioaccumulation/ Accumulation | No information available No information available. | | | |
| Mobility | No information available. | | | |
| | 12 Disease considerations | | | |

Waste Disposal Methods

13. Disposal considerations Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| 14. Transport information | | | |
|---------------------------|----------------------------|--|--|
| DOT | Not regulated | | |
| TDG | Not regulated | | |
| ΙΑΤΑ | | | |
| UN-No | 3261 | | |
| Hazard Class | 8 | | |
| Packing Group | 111 | | |
| IMDG/IMO | | | |
| UN-No | 3261 | | |
| Hazard Class | 8 | | |
| Packing Group | | | |
| | 15. Regulatory information | | |

International Inventories

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

| TSCA 12(b) | Not applicable | | | |
|---|--------------------------|-------------------------------------|--|--|
| SARA 313 | Not applicable | | | |
| SARA 311/312 Hazardous Categoriz Acute Health Hazard Chronic Health Hazard Fire Hazard Sudden Release of Pressure Ha Reactive Hazard | | Yes No No Yes | | |
| Clean Water Act | Not applicable | | | |
| Clean Air Act | Not applicable | | | |
| OSHA Occupational Safety and Health Administration Not applicable | | | | |
| CERCLA Not applicable | | | | |
| California Proposition 65 | This product does not co | ontain any Proposition 65 chemicals | | |
| State Right-to-Know | Not applicable | | | |
| U.S. Department of Transportation | | | | |
| Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant | N N N | | | |
| U.S. Department of Homeland Security This product does not contain any DHS chemicals. | | | | |
| Other International Regulations | | | | |
| Mexico - Grade | No information available | | | |
| Canada | | | | |

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

- E Corrosive material
- F Dangerously reactive material



16. Other information

Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com

Revision Date Print Date

Prepared By

10-Feb-2015 10-Feb-2015 **Revision Summary**

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

