

SAFETY DATA SHEET

Section 1 - Identification of Substance or Mixture and Company

Product identify:

Product name: 1,4- Butane sultone
Synonyms: 4-Hydroxybutane-1-sulfonic acid delta-sultone
Catalog number: PI-36820

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

Details of the supplier of the safety data sheet

Company identification: PI Chemicals Ltd.
633 Eshan Road,
Pudong New Area, Shanghai China, 201203

Telephone number: +86-21-58953700

Fax number: +86-21-58953701

E-mail address: info@pipharm.com

Emergency telephone number

Emergency number: +86-21-58953706

Section 2 - Hazards Identification

Classification of the substance or mixture:

Regulation (EC) No 1272/2008

Skin irritation Category 2

Eye irritation Category 2

Respiratory sensitization Category 1

Acute toxicity, Oral Category 4

Carcinogenicity Category 2

Label elements

Classification according to (EC) No 1272/2008



Signal word: Warning

Hazard statement(s):

H302: Harmful if swallowed.

H351: Suspected of causing cancer.

Precautionary statement(s)

P281: Use personal protective equipment as required.

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

P308 + P313: IF exposed or concerned: Get medical advice/ attention

Accroding to EU Directive 67/548/EEC or 1999/45/EC.

Symbol(s): Xn Harmful

Risk phrases:

R22: Harmful if swallowed .

R40: Limited evidence of a carcinogenic effect

Safety phrases:

S 36/37: Wear suitable protective clothing and gloves.

HMS classification:

Health hazard: 2

Flammability: 1

Physical hazards 0

NFPA rating:

Health hazard: 2

Fire: 1

Reactivity hazard: 0

Section 3: Composition & Information on Ingredients

Molecular formula: C₄H₈O₃S

Molecular weight: 136.17

Component		Concentration
CAS Number:	1633-83-6	99%
EC Number:	216-647-9	

Section 4 - First Aid Measures

Eye: Flush eyes with plenty of water for at least 15 minutes. Get medical aid if symptoms appear.

Skin: Wash skin with plenty of water at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists.

Ingestion: Wash mouth out with water. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical aid.

Section 5 – Fire-Fighting Measures

Extinguishing media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Special hazards arising from the substance or mixture: Carbon oxides

Advice for firefighters: Wear a self-contained breathing apparatus for fire fighting if necessary

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Use proper personal protective equipment as indicated in Section 8.

Environmental precautions: Prevent further spillage or leakage when safe and capable

Methods and materials for containment and cleaning up:

Vacuum or sweep up material and keep in a suitable closed container for disposal. Do not flush with water.

Section 7 - Handling and Storage

Precautions for safe handling:

Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with skin, eyes and clothes. Avoid inhalation of vapors and spray mist.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry place. Keep tightly closed. Room temperature.

Section 8 - Exposure Controls/Personal Protection

Control parameters:

Contains no materials with occupational exposure limits.

Exposure controls:

Ensure well ventilation, good industrial hygiene and safety practice.

Personal protective equipment

Eye/Face protection:

Wear appropriate protective eyeglasses under the standards such as EN166(EU) or type ABEK(EN14387).

Skin/Body protection:

Wear appropriate protective gloves which have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it to prevent skin exposure. Dispose of contaminated gloves in accordance with applicable laws. Wash and dry hands.

Wear appropriate protective clothing to prevent skin exposure.

Respiratory protection:

Use an approved respirator and components under appropriate government standards such as NIOSH(US) or CEN(EU) if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9- Physical and Chemical Properties

Physical state:	Liquid or crystal
Color:	Colorless to light yellow
Odour:	Weak odor
Melting point/freezing point:	12-15 °C(lit.)
Initial boiling point and boiling range:	>165 °C/25 mmHg(lit.)
Flash point:	113 °C /235.4 °F
Evaporation rate:	No data available
Flammability(solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	1.331 g/mL at 25 °C(lit.)
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available

Section 10-Stability and Reactivity

Reactivity:	No data available
Chemical stability:	Stable under recommended temperatures and pressures.
Possibility of hazardous reactions:	No data available
Conditions to avoid:	No data available.
Incompatible materials:	Strong oxidizing agents, Strong bases.
Hazard Decomposition products:	Carbon monoxide(CO), Carbon dioxide(CO ₂), Sulphur oxides(SO _x).

Section 11 - Toxicological Information

Acute toxicity:	
Component:	1,4- Butane sultone
LD50 Oral - rat -	500 mg/kg
Skin corrosion/irritation:	No data available
Serious eye damage/eye irritation:	No data available
Respiratory or skin sensitization:	May cause allergic reactions.
Germ cell mutagenicity:	No data available
Carcinogenicity:	
Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.	
Reproductive toxicity:	No data available

Specific target organ toxicity(STOT)-single exposure: No data available
Specific target organ toxicity (STOT)-repeated exposure: No data available
Aspiration hazard: No data available
Additional information: RTECS#: RP5425000

Section 12 – Ecological Information

Toxicity: No data available
Component: 1,4- Butane sultone
LC50 No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Component: 1,4- Butane sultone
Mobility in soil: No data available
Results of PBT and vPvB assessment: No data available
Other adverse effects: No data available

Section 13 - Disposal Consideration

Waste treatment methods

Product: Dispose of in accordance with federal, state and local environmental regulations
Contaminated packaging: Dispose of as unused product

Section 14 - Transport Information

IATA

Not dangerous goods

IMDG

Not dangerous goods

RID/ADR

Not dangerous goods

DOT(US)

Not dangerous goods

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available
Chemical safety assessment: No data available

Section 16 – Other Information

SDS creation date: Aug 19, 2011
Update: May 15, 2014

Disclaimer:

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