Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Furosemide USP
Commercial Name Not available.
Product Use Not available
Restrictions On Use Not available

Product Code 55-1784

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

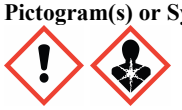
Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 Mutagenic category 3 Carcinogenic category 3 Toxic for reproduction category 3

Signal Word WARNING

Hazard Statement(s) Causes skin irritation. May cause respiratoru irritation. Suspected of damaging fertility or unborn child. May cause damage to organs thorugh prolonged or repeated exposure.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P281 Use personal protective equipment as required.
Response P308+P313 IF exposed or concerned: Get medical advice/attention.
Storage P405 Store locked up.
Disposal P501 Dispose of contents/container in approved incineration plant in accordance with all national regulations.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Furosemide USP
% By Weight 100
CAS# 54-31-9
Molecular Weight 330.75 g/mole
Chemical Formula C12-H11-CL-N2-O5-S
Synonym(s) 4-Chloro-N-(2-furylmethyl)-5-sulfamoylanthranilic acid

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Furosemide USP	54-31-9	100	Not Available.	LD50): Acute 2600 mg/kg[Rat]. 2000 mg/kg [mouse]. 800 mg/kg [Rabbit].

Section 4: First-Aid Measures

Inhalation Remove casualty to fresh air and keep warm and at rest.

Skin Contact Immediately take off all contaminated clothing. Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Eye Contact In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

Symptoms/Effects

Acute Not available

Delayed Not available

Immediate Medical Attention

Not available.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Water. Carbon dioxide (CO_2).

Unsuitable Extinguishing Media

avoid water jets to disperse the product.

Products of Combustion

Not available

Firefighters Special Equipment and Precautions

Do not inhale explosion and combustion gases. Burning produces heavy smoke. Substance that can sustain combustion when exposed to heat and ignition sources. Thermal decomposition produces toxic fumes of oxides of nitrogen and carbon. In the absence of oxygen may generate other toxic gases. Like most organic powders, may cause an explosion if the powder is dispersed into the air and set off. Advice for firefighters: Use suitable breathing apparatus . Wear respirator, gloves, protective footwear. CAUTION: Pressurized containers may explode when exposed to fire. And 'recommended the use of breathing apparatus and full protection for fire fighting, since the combustion of this substance may generate toxic fumes, corrosive and flammable. If possible contain water used for fire fighting and collect for later disposal Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Wear personal protection equipment. Remove persons to safety. See protective measures under point 7 and 8. Environmental precautions: Circumscribe the area of the spill and prevent the staff will come into contact if not properly protected. Avoid flames, sparks and prevent static buildup. Avoid generation of dust. Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Suitable material for taking up: absorbing material, organic, sand Methods and material for containment and cleaning up: Wash with plenty of water.

Section 7: Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes, inhaltion of vapours and mists. Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. Contamined clothing should be changed before entering eating areas. Do not eat or drink while working. See also section 8 for recomened protective equipment. Conditions for safe storage, including any incompatibilities: Always keep the containers tightly closed. Keep away from food, drink and feed. Incompatible materials: None in particular. Instructions as regards storage premises: Adequately ventilated premises.

Section 8: Exposure Controls/Personal Protection

Exposure Limits Not available.

Engineering Controls Not available

Personal Protection

Eye protection: Safety glasses with side protection or estate or visor. Must be available eye wash station. Work, however, according to good working practices. Protection for skin: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. Protection for hands: Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. Respiratory protection: Not needed for normal use. Provide exhaust systems in the workplace. Avoid inhalation of vapors and dust. Adequate ventilation to the premises where the product is stored and / or manipulated, however, avoid excessive ventilation and dust dispersed generation. Change clothes at the end of shift. Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Section 9: Physical and Chemical Properties

Appearance solid. (Crystalline solid.)
Odor Not available.
Odor Threshold Not available.

Melting Point	206 °C	**pH**	Not available.
Freezing Point	Not available.	**Vapor Pressure**	4.3x10-8 Pa a 25 °C
Boiling Point/Range	Not available.	**Vapor Density**	Not available.
Decomposition temperature	Not available.	**Viscosity**	Not available.
Partition Coefficient: n-octanol/water	2.03	**Evaporation Rate**	Not available.
Flash Point	Not available.	**Autoignition temperature**	Not available.
Flammability	Not available.	**Flammability or Explosive Limits:**	
		Lower	Not available.
		Upper	Not available.

Solubility(ies) 73.1 mg/l a 30 °C in water.
Other Not available.

Section 10: Stability and Reactivity

Reactivity Stable under normal conditions
Chemical Stability Stable under normal conditions
Hazardous Polymerization Not available.
Conditions to Avoid Stable under normal conditions
Incompatible Materials Not available.
Hazardous Decomposition Products Not available

Section 11: Toxicological Information

RTECS Not available.

Acute Toxicity
oral (except oral-rat LD50) 2600 mg / kg (1)

Skin Corrosion/Irritation
Not available

Serious Eye Damage/Irritation
Not available

Respiratory or Skin Sensitization
Not available

Germ Cell Mutagenicity
Not available

Carcinogenicity
There is inadequate evidence in humans for the carcinogenicity of furosemide.

Reproductive Toxicity
Possible risk of harm to the unborn child

Routes of Entry
Not available

Symptoms Related to Exposure
Not available

Potential Health Effects
Not available.

Target Organ(s) Not available

Section 12: Ecological Information

Ecotoxicity
Adopt good working practices, so that the product is not released into the environment.

Persistance and Degradability
Not available

Bioaccumulative Potential
BIOACCUMULATION: aquatic sediment BCF aquatic species 3 (11) TRANSPORT AND DISTRIBUTION Adsorption / desorption: Koc at 20 ° C 302 (11)

Mobility in Soil
Not available

Other Adverse Effects
Not available

Section 13: Disposal Considerations

Waste Disposal
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Disposal of Container
Not available

Other Considerations
Not available

Section 14: Transport Information

DOT Classification
Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information

Regulations
Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n. 1272/2008 (CLP), Regulation (CE) n. 790/2009 (1° ATP CLP), Regulation (EU) n. 453/2010 (Annex I). Where applicable, refer to the following regulatory provisions : Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments. Regulation (EC) nr 648/2004 (detergents). 1999/13/EC (VOC directive)

Other
Not available.

Section 16: Other Information

The information contained here are based on the present state of our knowledge and describe our product under aspect of safety. The data do not signify any warranty with regard to the product properties.