

Section 1: Identification

Product Name Ursodiol USP
Commercial Name Actigall, Arsacol, Cholit-ursan, Delursan, Destolit, Deursil, Litursol, Lyeton, Peptarom, Solutrat, Ursacol, UrSO, Ursobilin,
Product Use Not available.
Restrictions On Use Not available.
Product Code 30-2909
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: Not available.
CFR 1910.1200
Signal Word NON-HAZARDOUS
Hazard Statement(s) Not available
Pictogram(s) or Symbol(s)

Precautionary Statement(s):

Prevention Not available.
Response Not available.
Storage Not available.
Disposal Not available.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Ursodiol
% By Weight 100
CAS# 128-13-2
Molecular Weight 392.57 g/mole
Chemical Formula C₂₄H₄₀O₄
Synonym(s) Ursodeoxycholic Acid; Ursodesoxycholic Acid; 17-beta-(1-Methyl-3-carboxypropyl)etiocolane-3-alpha,7-beta-diol 3 - a l p h a , 7 - b e t a - D i h y d r o x y - 5 - b e t a - c h o l a n o i c a c i d ; 3,7-Dihydroxycholan-24-oic acid; 3-alpha,7-beta-Dihydroxycholanic acid; 3-alpha, 7-beta-Dioxycholanic acid

Mixtures Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Ursodiol	128-13-2	100	N/A	Not applicable.

Section 4: First-Aid Measures

Inhalation	Move the person to fresh air. In the case of respiratory symptoms (cough, dyspnea) place the person in a semi-seated position and administer oxygen. Provide artificial respiration if the person is not breathing.
Skin Contact	Flush the skin with copious amounts of water (and soap, if possible) for at least 15 minutes. Consult a physician if there are symptoms of skin irritation and/or pain.
Eye Contact	Remove contact lenses, if present and easy to do. Flush the eyes, kept open, with copious amounts of running water for at least 15 minutes. Consult a physician, especially if there are symptoms of eye irritation and/or pain.
Ingestion	Do not induce emesis. Do not administer anything by mouth unless advised to do so by a poison control center. Rinse the mouth and consult a physician.
Symptoms/Effects	
Acute	Not available.
Delayed	Not available.

Immediate Medical Attention

Need for immediate medical attention: If the victim has severe symptoms, immediately call your local health care emergency number to request the intervention of a physician. Refer to each case a poison control center for advice and medical toxicology specialist from the early stages of the rescue. Consult a physician if in any case any symptoms, even mild, persists. Special treatment needed and antidotes to be available on the workplace Freshwater for washing skin and eye. Oxygen. Activated charcoal, to be administered after toxicological advice. Personal protective equipment for first aid responders: Wear appropriate protective equipment to prevent the contamination of the first aid responder from the victim. Removal and handling of contaminated clothing and shoes In case of gross contamination, remove clothing and shoes. Place them into a suitable, closed, temporary storage away from the working area.

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

As the substance is a solid material, the most suitable extinguishing media are water and dry chemicals (powders); foam and carbon dioxide are less effective. In the choice of extinguishing media, consider the other materials involved in the fire.

Unsuitable Extinguishing Media

Not available.

Products of Combustion

HAZARDOUS COMBUSTION PRODUCTS: carbon oxides (CO_x).

Firefighters Special Equipment and Precautions

GENERAL INFORMATION: Move all people away and stay upwind of the fire. Do not enter closed rooms without adequate protection. Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations. SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a depressurized mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in the event of large quantities of fume.

Section 6: Accidental Release Measures

For non-emergency personnel (a) eliminate sources of ignition (cigarettes, flames, sparks, etc.) from the area in which the leak occurred; (b) send away individuals who are not suitably equipped For emergency responders (a) do not handle damaged containers or leaked product before donning appropriate protective gear (Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing; (c) if there are no contraindications, spray powder with water to prevent the formation of dust and provide sufficient ventilation. Appropriate advice on how to contain a spill: make sure the leakage site is well aired Appropriate advice on how to clean up a spill: collect the leaked product and place in a plastic container; if there are no contraindications, use jets of water to eliminate product residues.

Section 7: Handling and Storage

Protective measure Measures to prevent fire (a) eliminate sources of ignition (cigarettes, flames, sparks, etc.); (b) avoid shaking the powder or creating dust clouds. Measures to prevent aerosol and dust generation (a) avoid shaking packaging when filling/emptying them; (b) keep containers tightly sealed when not in use. Measures to protect the environment (a) general ventilation; (b) LEV; (c) filters or water scrubbers on exhaust ventilation. Advice on general occupational hygiene (a) not to eat, drink and smoke in work areas; (b) to wash hands after use; (c) to remove contaminated clothing and protective equipment before entering eating areas. Technical measures and storage conditions Store away from incompatible materials (Section 10) The substance should be stored in a manner to prevent degradation, contamination, and cross-contamination, keeping material in properly labeled tightly closed containers. The substance stored in plastic drums should be stored off the floor and suitably spaced to permit cleaning and inspection. Packaging materials Double antistatic polythene bag (inner packaging); plastic (outer packaging). Requirements for storage rooms and vessels There should not be present sources of ignition (cigarettes, flames, sparks, etc.)

Section 8: Exposure Controls/Personal Protection**Exposure Limits**

Not available.

Engineering Controls

For manufacturing and pilot plant operations: • charge/discharge equipment under nitrogen purging, and convey emissions to abatement systems ; • use process enclosures, containment technology, or other engineering controls to keep airborne levels below recommended exposure limit (e.g., barrier/containment technology and direct coupling, hybrid unidirectional airflow/local exhaust ventilation solutions, etc.); • ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area; • use of HEPA filter for filtration of exhaust from dry product handling areas is preferred.

Personal Protection

(a) Eye/face protection: full mask (EN 136). (b) Skin protection (i) Hand protection: natural rubber gloves (EN 374). (ii) Other: professional disposable overall with hood for use with chemicals (EN ISO 13982; EN 1149). (c) Respiratory protection: full mask with P3 filter (EN 143).

Section 9: Physical and Chemical Properties

Appearance	White crystalline powder		
Odor	Not available		
Odor Threshold	Not available.		
Melting Point	About 200+205°C	pH	Not available.
Freezing Point	Not available.	Vapor Pressure	0 mmHg at 25°C
Boiling Point/Range	547.148°C at 760 mmHg	Vapor Density	Not available.
Decomposition temperature	Not available.	Viscosity	Not available.
Partition Coefficient: n-octanol/water	3	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)	Practically insoluble in Water; freely soluble in Ethanol (96%), slightly soluble in Acetone, practically insoluble in Methylene Chloride		
Other	Not available.		

Section 10: Stability and Reactivity

Reactivity	Not available.
Chemical Stability	Stable in normal conditions of use.
Hazardous Polymerization	Not available.
Conditions to Avoid	Avoid exposure to moisture.
Incompatible Materials	Keep away from oxidizing agents
Hazardous Decomposition Products	In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

Section 11: Toxicological Information**RTECS** FZ2000000**Acute Toxicity**

Not available.

Skin Corrosion/Irritation

Not available.

Serious Eye Damage/Irritation

Not available.

Respiratory or Skin Sensitization

Not available.

Germ Cell Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive Toxicity

Not available.

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**

Not available.

Persistence and Degradability

Not available.

Bioaccumulative Potential

Not available.

Mobility in Soil

Not available.

Other Adverse Effects

Not available.

Section 13: Disposal Considerations**Waste Disposal**

Waste treatment methods: Incineration (product). Reuse, when possible, the packaging for other purposes. Product / Packaging disposal: Product residues should be considered special hazardous waste. Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations. Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations. Waste treatment-relevant information: The hazard level of waste containing this product should be evaluated according to applicable regulations. Sewage disposal-relevant information: Waste should not be disposed of by release to sewers. Other disposal recommendations: To ensure that risks are adequately controlled at the waste stage, disposal must be in accordance with current applicable laws and regulations and material characteristics at the time of disposal. Final decisions on the appropriate waste management method, in line with regional, national and European legislation, and possible adaptation to local conditions, remains the responsibility of the waste treatment operator. Other disposal recommendations: To ensure that risks are adequately controlled at the waste stage, disposal must be in accordance with current applicable laws and regulations and material characteristics at the time of disposal. Final decisions on the appropriate waste management method, in line with regional, national and European legislation, and possible adaptation to local conditions, remains the responsibility of the waste treatment operator.

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**

Not available.

Other

Not available.

Section 16: Other Information

Not available.