

**Section 1: Identification**
**Product Name** Lorazepam USP

**Commercial Name** Not available.

**Product Use** Not available.

**Restrictions On Use** Not available.

**Product Code** 24-1005

**Company** PCCA  
9901 South Wilcrest  
Houston, TX 77099  
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In case of emergency contact:  
**CHEMTREC (24hr) 1-800-424-9300**
**Section 2: Hazard(s) Identification**
**OSHA Haz Com:** Reproductive toxicity, Category 2 H361d Reproductive toxicity, Additional category, Effects on or via  
**CFR 1910.1200** lactation H362 Specific target organ toxicity – Single exposure, Category 3, Narcosis H336

**Signal Word** WARNING

**Hazard Statement(s)** May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause harm to breast-fed children

**Pictogram(s) or Symbol(s)**

**Precautionary Statement(s):**

|                   |                                                                                                                                                                                                                                                               |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Prevention</b> | Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy and while nursing.                                                                                  |
| <b>Response</b>   | Wash hands, forearms and face thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. IF exposed or concerned: Get medical advice/attention. |
| <b>Storage</b>    | Store in a well-ventilated place. Keep container tightly closed.                                                                                                                                                                                              |
| <b>Disposal</b>   | Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation                                                                                                    |

**Section 3: Composition/Information on Ingredients**

|                          |                                                        |
|--------------------------|--------------------------------------------------------|
| <b>Substance/Mixture</b> | Substance                                              |
| <b>Components</b>        | Lorazepam                                              |
| <b>% By Weight</b>       | 100                                                    |
| <b>CAS#</b>              | 846-49-1                                               |
| <b>Molecular Weight</b>  | 321.2                                                  |
| <b>Chemical Formula</b>  | C15-H10-C-12-N2-O2                                     |
| <b>Synonym(s)</b>        | Lorasolid; Emotival; Ativan; Almazine; Lorax; Lorsilan |

| <b>Mixtures</b> | <b>CAS#</b> | <b>% by Weight</b> | <b>TLV/PEL</b> | <b>LC50/LD50</b>                                            |
|-----------------|-------------|--------------------|----------------|-------------------------------------------------------------|
| <b>Name</b>     |             |                    |                |                                                             |
| Lorazepam       | 846-49-1    | 100                |                | Oral (LD50): Acute: 4500 mg/kg (Rat).<br>1850 mg/kg (Mouse) |

**Section 4: First-Aid Measures**

|                                    |                                                                                                                                                                                             |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                  | Supply fresh air and be sure to call for a doctor. In case of unconsciousness, place patients in a stable position for transportation.                                                      |
| <b>Skin Contact</b>                | Rinse the eyes with plenty of water and open eye lids during operation. If symptoms persist consult a doctor.                                                                               |
| <b>Eye Contact</b>                 | Not available.                                                                                                                                                                              |
| <b>Ingestion</b>                   | Rinse mouth with water. See that this water is not swallowed. Spit liquid out again. Drink plenty of water but never give anything to an unconscious person. Call for a doctor immediately. |
| <b>Symptoms/Effects</b>            |                                                                                                                                                                                             |
| <b>Acute</b>                       | Not available.                                                                                                                                                                              |
| <b>Delayed</b>                     | Not available.                                                                                                                                                                              |
| <b>Immediate Medical Attention</b> | Symptomatic treatment. No Specific antidote known.                                                                                                                                          |

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

Carbon dioxide, dry chemical powder or appropriate foam. Use the fire fighting measures that suit the environment.

**Unsuitable Extinguishing Media**

Not available.

**Products of Combustion**

Not available.

**Firefighters Special Equipment and Precautions**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Section 6: Accidental Release Measures**

Personal related safety precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Avoid formation of dust. Use respiratory device against the effects of fumes/dust/aerosol. Measures for Environmental protection: DO not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to penetrate the ground/soil. Measures for cleaning and collecting: Pick up mechanically. Avoid dust formation absolutely. In necessary pick up with a tested and approved industrial vacuum cleaner.

**Section 7: Handling and Storage**

Information for safe handling: Prevent formation of dust. Any deposit of dust which cannot be avoided must be regularly removed. Ensure good ventilation/exhaust at the work place. Avoid inhalation of dust. Information about protection against fires: Dust can combine with air to form explosive mixture. Keep ignition source away. Do not smoke. Protect against electrostatic charges. Requirements to be met by storerooms and receptacles: Store container tightly sealed at a cool and dry place with sufficient ventilation. Information about storage in one common storage facility: Store away from food stuffs. Protect from exposure to light. Protect from heat (steam pipes, radiators etc), open flames and other ignition sources and direct sun light.

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

|                             |                                                                                                                                               |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exposure Limits</b>      | Not available.                                                                                                                                |
| <b>Engineering Controls</b> | Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. |

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**Personal Protection**

Keep away from food stuffs, beverages and feed. Do not eat or during while working. Wash hands before break and at the end of work. Vacuum clean contaminated clothing. Do not blow or brush off contamination. Wear appropriate Niosh/msha-approved respirator, chemical-resistant Safety shower and eye bath. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling. Wash contaminated clothing before reuse. Breathing equipment: At formation of dust: In case of brief exposure, use dust and vapor respirator. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air. Short term filter device : Filter P2 Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out. E.g. retention and or local exhaust. Protection of hands: Chemical resistant gloves The glove material has to be impermeable and resistant to the product /the substance / the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. After use of gloves apply skin-cleaning agents and skin cosmetics. Material of Gloves: For un-dissolved solid substances following material may be suitable: Nitrile rubber (NBR), Butyl rubber (BR), Fluorocarbon rubber (FKM) and polypropylene rubber (CR). The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Penetration time of glove material : The exact penetration time has to be found out by the manufacturer of the protective gloves and has to be observed. Eye protection: Safety glasses with side shield. Body protection: Protective work clothing.

**Section 9: Physical and Chemical Properties**

|                                                   |                                        |                                          |                |
|---------------------------------------------------|----------------------------------------|------------------------------------------|----------------|
| <b>Appearance</b>                                 | Almost white Crystalline powder        |                                          |                |
| <b>Odor</b>                                       | Odorless.                              |                                          |                |
| <b>Odor Threshold</b>                             | Not available.                         |                                          |                |
| <b>Melting Point</b>                              | About 167 oC                           | <b>pH</b>                                | Not available. |
| <b>Freezing Point</b>                             | Not available.                         | <b>Vapor Pressure</b>                    | Not available. |
| <b>Boiling Point/Range</b>                        | Not available.                         | <b>Vapor Density</b>                     | Not available. |
| <b>Decomposition temperature</b>                  | Not available.                         | <b>Viscosity</b>                         | Not available. |
| <b>Partition Coefficient:<br/>n-octanol/water</b> | Not available.                         | <b>Evaporation Rate</b>                  | Not available. |
| <b>Flash Point</b>                                | Not available.                         | <b>Autoignition temperature</b>          | > 500 oC       |
| <b>Flammability</b>                               | Not available.                         | <b>Flammability or Explosive Limits:</b> |                |
|                                                   |                                        | <b>Lower</b>                             | Not available. |
|                                                   |                                        | <b>Upper</b>                             | Not available. |
| <b>Solubility(ies)</b>                            | ~ 20 oC : 1 g in 10 mL of water        |                                          |                |
| <b>Other</b>                                      | Bulk density at ~ 20 oC: 0.25-0.6 g/mL |                                          |                |

**Section 10: Stability and Reactivity**

|                                         |                                                                                                                    |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                       | Not available                                                                                                      |
| <b>Chemical Stability</b>               | Not available.                                                                                                     |
| <b>Hazardous Polymerization</b>         | Risk of dust explosion if enriched with fine dust in the presence of air. Hazardous polymerization will not occur. |
| <b>Conditions to Avoid</b>              | Protect from light.                                                                                                |
| <b>Incompatible Materials</b>           | Strong oxidizing agents                                                                                            |
| <b>Hazardous Decomposition Products</b> | HCl gas, carbon monoxide, carbon dioxide, nitrogen oxides                                                          |

**Section 11: Toxicological Information****RTECS** DF0350000**Acute Toxicity**

ORL-RAT LD50: 2 gm/kg mdacap 15,173,1979 IPR-RAT LD50: 46780 ug/kg bcfaai 125,31,1986 IVN-RAT LD50: 55860 ug/kg bcfaai 125,31,1986 ORL-MUS LD50: 940 mg/kg aiptak 154,131,1965 IPR-MUS LD50: 49390 ug/kg bcfaai 125,31,1986 IVN-MUS LD50: 69890 ug/kg bcfaai 125,31,1986 IVN-RBT LD50: 25050 ug/kg bcfaai 125,31,1986

**Skin Corrosion/Irritation**

May cause skin irritation; May be harmful if absorbed through the skin.

**Serious Eye Damage/Irritation**

May cause eye irritation.

**Respiratory or Skin Sensitization**

Material may be irritating to mucous membranes and upper respiratory tract.

**Germ Cell Mutagenicity**

No

**Carcinogenicity**

No

**Reproductive Toxicity**

Not available.

**Routes of Entry**

Inhalation. Ingestion. Skin. Eye.

**Symptoms Related to Exposure**

Not available.

**Potential Health Effects**

Not available.

**Target Organ(s)**

Behavioral (sleep) Behavioral (change in motor activity) Behavioral (anxiety)

**Section 12: Ecological Information****Ecotoxicity**

Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

**Persistence and Degradability**

This product is readily biodegradable.

**Bioaccumulative Potential**

Not available.

**Mobility in Soil**

Log POW<0 – not lipophilic, no bioaccumulation. Ecotoxic effects, Aquatic toxicity: Data not available. General Notes: Water hazard class 2 (German regulation) (self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system. Danger to drinking water even if small quantities leak into ground water.

**Other Adverse Effects**

Not available.

**Section 13: Disposal Considerations****Waste Disposal**

Must not be disposed of together with household garbage. DO not allow product to reach sewage system. Must be recycled or disposed of according to the rules. Waste has to be classified according to the European waste catalogue based on the identification of the waste generating source.

**Disposal of Container**

Not available.

**Other Considerations**

Not available.

**Section 14: Transport Information****DOT Classification**

UN-Number 2811 Packaging Group III Label 6.1 Description of Goods 2811 Toxic solid, Organic, N.O.S (Lorazepam) Limited Quantities (LQ) LQ9 Transport category 2 Tunnel Restriction code E Remarks 25/50 kg containers

**Section 15: Regulatory Information****Regulations**

Markings according to EC regulations: The product has been classified and marketed in accordance with EC Directive/Ordinance on Hazardous materials. Code Letter and Hazard designation of the product. Xn Harmful/ May cause sensitization by skin contact Risk phrases: 22 Harmful if Swallowed Safety Phrases: 22 Do not breathe dust 36 Wear suitable protective clothing 60 This material and its container must be disposed of as hazardous waste. National Regulations: Information about limitations of use: Take note of Directive 94/33/EC on the protection of young people at work. Take note of directive 92/85/EC on the safety and health of pregnant workers at work. Water hazard class: Water hazard class 2 (self-assessment): hazardous for water.

**Other**

Not available.

**Section 16: Other Information**

Not available.