

Safety Data Sheet

Issuing date: 02/17/2015

Revision date: 02/18/2015

Revision number: 00

1. Identification of the substance/preparation and the company/undertaking

GHS product identifier

Product name: Lorazepam Oral Concentrate USP

Other mean of identification

Product code(s): **0121-0770 -01**
UN-Number: NA
Synonyms: Compare to Ativan®

Recommended use of the chemical and restrictions on use

Recommended use: Pharmaceutical product used as antianxiety agent
Uses advised against: Do not use except as prescribed.

Supplier address/information

Pharmaceutical Associates, Inc.
201 Delaware Street
Greenville, SC 29605 (864) 277 -7282

Emergency telephone number: CHEMTREC 800.424.9300

2. Hazards Identification

Classification This product is a mixture and is a pharmaceutical product. It is considered non-hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Chemical family: Mixture

Statement of Hazard: May be harmful if swallowed. May cause irritation based on components. Repeat dose studies in animals have shown a potential to cause adverse effects on developing fetus. May cause harm to breast fed babies.

Additional Hazard Information

Short term: May be harmful if swallowed. May cause irritation based on components
Long term: Repeat-dose studies in animals have shown a potential to cause adverse effects on developing fetus. May cause harm to breast fed babies.

Known Clinical Effects: Therapeutic use of this substance has resulted in sedation, dizziness, weakness, clumsy motion of limbs/trunk (ataxia), incoordination, fatigue, drowsiness, amnesia, confusion, state of intense good feeling (euphoria), suicidal behavior. Benzodiazepines may cause fetal damage when administered during pregnancy. Secreted in human breast milk.

EU Indication of danger: Not classified.

Safety Data Sheet

Issuing date: 02/17/2015

Revision date: 02/18/2015

Revision number: 00

Emergency overview

Seek medical attention in case of accidental exposure or overdose. The product is generally safe when used as prescribed.

Note: This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the active substance or its intermediates regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential of exposure in your workplace.

Precautionary statements

General advice: See medical attention in case of accidental exposure or overdose.

Eyes: Avoid contact with eyes.

Skin Contact: Avoid skin contact.

Inhalation: Not intended for inhalation.

Ingestion: Generally safe at recommended doses. In case of overdose, seek medical attention immediately.

Storage: There are no special storage conditions for safety. For product integrity, store under conditions specified on the label.

Disposal: Dispose of in accordance with applicable laws and regulations.

3. Composition/Information on ingredients

Chemical name	CAS-No	mg/mL	Trade Secret
Lorazepam	846-49-1	2 mg/mL	
Propylene Glycol	57-55-6		X
Polyethylene Glycol 400	25322-68-3		X

4. First aid measures

Description of necessary first-aid measures

Eye contact:

Flush with running water for 15 minutes holding eyelids open. Contact medical personnel.

Skin contact:

Wash contaminated area thoroughly with soap and water. If irritation persists, contact medical personnel.

Safety Data Sheet

Issuing date: 02/17/2015

Revision date: 02/18/2015

Revision number: 00

Inhalation:
Remove to fresh air and contact medical personnel.

Ingestion:
Overdosage or accidental ingestion – Do not induce vomiting. Contact medical personnel or poison control center.

Most important symptoms/effects, acute and delayed

Most adverse reactions are dose dependent, including CNS effects and respiratory depression. Overdosage has occurred predominantly in combination with alcohol and/ or other drugs and is manifested by varying degrees on central nervous system depression ranging from drowsiness to coma.

Indication of immediate medical attention and special treatment needed, if necessary

NA

Notes to Physician: NA

5. Fire-fighting measures

Suitable extinguishing media:	Use carbon dioxide, dry chemical or water spray.
Specific hazards arising from the chemical	May burn emitting oxides of chlorine, nitrogen and carbon.
Explosion data:	Not applicable
Protective equipment and precautions for firefighters	During all firefighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Personnel involved in clean-up should wear appropriate personal protective equipment (See Section 8). Minimize exposure.
Environmental precautions	Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.
Methods and materials for containment and cleaning up	
<ul style="list-style-type: none">• Methods for containment:• Methods for cleaning up:	Isolate area around spill as specified by site procedures. Absorb the liquid with suitable material. Dispose of spill material in accordance with applicable federal, state or local regulations.

Safety Data Sheet

Issuing date: 02/17/2015

Revision date: 02/18/2015

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7. Handling and storage

Precautions for safe handling

Handling:

No special handling required for hazard control under conditions of normal product use.

Conditions for safe storage, including any incompatibilities

Storage:

No special storage required for hazard control. For product protection, follow storage recommendations on the case label, primary product label and insert.

Incompatible products:

Not applicable.

8. Exposure controls/personal protection

Control parameters

Exposure guidelines The exposure guidelines listed below are for the individual components and not the product itself.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lorazepam	Not available	Not available	Not available
Propylene Glycol	Not available	Not available	Not available
Polyethylene Glycol 400	Not available	Not available	Not available

Appropriate engineering controls

Engineering measures:

Engineering controls should be used to limit exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection:

Not required under normal conditions of use. Wear safety glasses or goggles if eye contact is possible.

Skin and body protection:

Impervious gloves and protective clothing are recommended if skin contact with drug product is possible and for bulk processing operations.

Respiratory protection:

Not required under normal use of the product. If the applicable PEL (Permissible Exposure Limit) is exceeded use an appropriate respirator.

Hygiene measures:

Wash hands thoroughly after use.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:

Solution

Odor:

Slight

Appearance:

Clear colorless

Odor threshold:

Not available

Safety Data Sheet

Issuing date: 02/17/2015

Revision date: 02/18/2015

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Property	Values	Remarks/Method
pH	4.0 – 7.0	Current USP
Melting point/range	Not applicable	
Boiling point/boiling range	Not available	
Flash point	Not applicable	
Evaporation rate	Not applicable	
Flammability (solid, gas)	Not applicable	
Flammability limits in air	Not applicable	
-upper flammability limit	Not applicable	
-lower flammability limit	Not applicable	
Vapor pressure	Not applicable	
Vapor density	Not applicable	
Specific gravity	1.1 – 1.2	Current USP
Water solubility	Not applicable	
Solubility in other solvents	Not applicable	
Partition coefficient: n-octanol/water	Not applicable	
Autoignition temperature	Not applicable	
Decomposition temperature	Not applicable	
Viscosity	Not available	
Flammable properties	Not applicable	
Explosive properties	Not applicable	
Oxidizing properties	Not applicable	

Other information

VOC content (%): None

10. Stability and reactivity

Reactivity Stable at normal conditions

Chemical stability Stable at normal conditions

Possibility of hazardous reactions Stable at normal conditions

Conditions to avoid Keep away from heat and other sources of ignition, including electrostatic discharge.

Incompatible materials As a precautionary measure, keep away from strong oxidizers

Hazardous decomposition products None known

11. Toxicological information

Information on likely routes of exposure

Product information:

- Inhalation: Not Available
- Eye contact: Not Available
- Skin contact: Not Available
- Ingestion: Not Available

Chemical name	LD50 oral	LD50 dermal	LC50 inhalation
Lorazepam	1850 mg/kg Mouse	Not available	Not available
Propylene Glycol	20000 mg/kg Rat	20800 mg/kg Rabbit	Not available
Polyethylene Glycol 400	26800 mg/kg Rat	>20000 mg/kg Rabbit	13 8hr. Rat

Symptoms related to the physical, chemical and toxicological characteristics

Therapeutic use of this substance has resulted in sedation, dizziness, weakness, clumsy motion of limbs/trunk (ataxia), incoordination, fatigue, drowsiness, amnesia, confusion, state of intense good feeling (euphoria), suicidal behavior. Benzodiazepines may cause fetal damage when administered during pregnancy. Secreted in human breast milk.

Delayed and immediate effects and also chronic effects from short and long term exposure

- Sensitization: No data available
- Mutagenic effects: No data available
- Carcinogenicity: Not carcinogenic
- Reproductive toxicity: May cause congenital malformation in the fetus. Suspected human reproductive toxicant.
- STOT – single exposure: No data available
- STOT – repeated exposure: No data available
- Aspiration hazard: No data available

Numerical measures of toxicity – product

No data available

12. Ecological information

Ecotoxicity:

Environmental properties have not been thoroughly evaluated for this product. Releases to the environment should be avoided.

Persistence and Degradability

No data available

Bioaccumulation

No data available

Safety Data Sheet

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Other adverse effects:

No data available

The following table includes data for the individual components.

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to micro-organisms	Daphnia Magna (water flea)
Lorazepam	Not Available	Not Available	Not Available	Not Available
Propylene Glycol	Not Available	52930 mg/L 96 hr. Pimephales promelas	Not Available	>10000 mg/mL 48 hr NOEC
Polyethylene Glycol 400	Not Available	>5000 mg/L 24 hr. Goldfish	Not Available	Not Available

13. Disposal considerations

Waste disposal methods

Dispose of waste in accordance with all federal, state and local regulations.

Contaminated packaging

Dispose of waste in accordance with all federal, state and local regulations.

14. Transport information

Notes:

Not regulated for transport under USDOT, IATA, TDG, IMDG or other regulations.

15. Regulatory information

International inventories

EINECS:

Lorazepam Polyethylene Glycol, and Propylene Glycol are listed on the EINECS inventory list.

IECSC:

Not Listed

Legend:

TSCA:

Lorazepam Oral Concentrate USP is not listed on TSCA inventory; however the components Propylene Glycol and Polyethylene Glycol are listed.

U.S. Federal regulations

Not listed as dangerous goods.

Safety Data Sheet

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US DEA:

Schedule IV substance.

SARA 311/312 Hazard categories

Not Applicable

Clean Water Act

This product **does not** contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

No components are listed under CERCLA.

California Proposition 65:

This product does contain Lorazepam which is listed as a Proposition 65 chemical as known to cause birth defects or reproductive harm.

U.S. state Right-to-Know regulations

“X” designates that the ingredients are listed on the state Right-to-Know list

Chemical name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Lorazepam					
Propylene Glycol	X		X		
Polyethylene Glycol 400	X		X		

U.S. EPA label information

Not applicable

16. Other information

Prepared by: Pharmaceutical Associates Regulatory Affairs
Issuing date: 02/17/2015
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General Disclaimer

The information provided on this SDS 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.

End of Safety Data Sheet