

## Section 1: Identification

|                                   |  |   |
|-----------------------------------|--|---|
| <b>Common Name/Trade Name</b>     | URSODIOL USP   |   |
| <b>Supplier Information</b>       | Letco Medical, LLC<br>1316 Commerce Drive NW<br>Decatur, AL 35601<br>1 (800) 239-5288<br>+1 (734) 843-4693 | <b>IN CASE OF EMERGENCY:</b><br>Chemtrec<br>1 (800) 424-9300 (24 hours) |
| <b>Product Synonym(s)</b>         | Ursodeoxycholic Acid   |   |
| <b>Relevant Use(s) of Product</b> | Manufacture or Compounding of Substances   |   |

## Section 2: Hazards Identification

|   |                                       |
|---|---------------------------------------|
| <b>Classification of Substance or Mixture</b> | Not a hazardous substance or mixture. |
| <b>Signal Word</b>                            | None                                  |
| <b>Hazard Statement(s)</b>                    | N/A                                   |
| <b>Pictogram(s)</b>                           | N/A                                   |
| <b>Precautionary Statement(s)</b>             | N/A                                   |
| <b>Hazards Not Otherwise Classified</b>       | No data available                     |
| <b>Ingredient(s) with Unknown Toxicity</b>    | No data available                     |

## Section 3: Composition/Information on Ingredients

|  |                      |
|--|----------------------|
| <b>Chemical Name</b>                           | Ursodeoxycholic acid |
| <b>Common Name</b>                             | Usodiol              |
| <b>CAS Number</b>                              | 128-13-2             |
| <b>Impurities and/or Stabilizing Additives</b> | No data available    |

## Section 4: First Aid Measures

|  |   |
|--|---|
| <b>General Advice</b>                      | No data available.  |
| <b>If Inhaled</b>                          | If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.  |
| <b>In Case of Skin Contact</b>             | In case of skin contact, immediately wash skin with soap and plenty of water for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.                  |
| <b>In Case of Eye Contact</b>              | In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes examined and tested by medical personnel.   |
| <b>If Swallowed</b>                        | If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel. |
| <b>Most Important Symptoms and Effects</b> | No data available.  |

## Section 5: Fire Fighting Measures

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>                       | Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers. Unsuitable Extinguishing Media: A solid water stream may be inefficient. |
| <b>Special Hazards Arising From the Substance/Mixture</b> | No data available.  |
| <b>Special PPE and/or Precautions for Firefighters</b>    | As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.                             |

## Section 6: Accidental Release Measures

|  |  |
|--|--|
| <b>Personal Precautions, Protective Equipment and Emergency Procedures</b> | Avoid raising and breathing dust, and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves). |
| <b>Methods and Materials Used for Containment</b>                          | Avoid release into the environment.  |
| <b>Cleanup Procedures</b>  | Transfer to a proper chemical waste container for disposal.  |

## Section 7: Handling and Storage

|                                      |   |
|--------------------------------------|---|
| <b>Precautions for Safe Handling</b> | Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling. Avoid breathing (dust, vapor, mist, gas). Avoid prolonged or repeated exposure. |
| <b>Conditions for Safe Storage</b>   | Keep in tightly closed and light resistant containers, in a dry place.  |

## Section 8: Exposure Controls/Personal Protection

|   |   |
|---|---|
| <b>Components with Workplace Control Parameters</b> | No data available.  |
| <b>Appropriate Engineering Controls</b>             | Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. |
| <b>PPE - Eye/Face Protection</b>                    | Safety glasses  |
| <b>PPE - Skin Protection</b>                        | Compatible chemical-resistant gloves  |
| <b>PPE - Body Protection</b>                        | Lab coat  |
| <b>PPE - Respiratory Protection</b>                 | NIOSH approved respirator, as conditions warrant.   |

## Section 9: Physical and Chemical Properties

|   |   |
|---|---|
| <b>Appearance</b>                                   | Physical States: Solid. A crystalline white powder. |
| <b>Upper/Lower Flammability or Explosive Limits</b> | No data available                                   |
| <b>Odor</b>   | No data available                                   |
| <b>Vapor Pressure</b>                               | No data available                                   |
| <b>Odor Threshold</b>                               | No data available                                   |
| <b>Vapor Density</b>                                | No data available                                   |
| <b>pH</b>   | No data available                                   |
| <b>Relative Density</b>                             | No data available                                   |
| <b>Melting Point/Freezing Point</b>                 | about 202C  |
| <b>Solubility</b>                                   | Insoluble in water. Soluble in ethanol.             |
| <b>Initial Boiling Point and Boiling Range</b>      | No data available                                   |
| <b>Flash Point</b>                                  | No data available                                   |
| <b>Evaporation Rate</b>                             | No data available                                   |
| <b>Flammability (Solid, Gas)</b>                    | No data available                                   |
| <b>Partition Coefficient</b>                        | No data available                                   |
| <b>Auto-Ignition Temperature</b>                    | No data available                                   |
| <b>Decomposition Temperature</b>                    | No data available                                   |
| <b>Viscosity</b>                                    | No data available                                   |

## Section 10: Stability and Reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | No data available   |
| <b>Chemical Stability</b>                 | Stable.   |
| <b>Possibility of Hazardous Reactions</b> | No data available   |
| <b>Conditions to Avoid</b>                | No data available   |
| <b>Incompatible Materials</b>             | Strong oxidizing agents   |
| <b>Hazardous Decomposition Products</b>   | Hazardous Decomposition or byproducts: carbon dioxide, carbon monoxide. Hazardous Reactions will not occur. |

## Section 11: Toxicological Information

|   |   |
|---|---|
| <b>Acute Toxicity - LD50 Oral</b>                         | Ursodeoxycholic Acid - Toxicity Data: Oral LD50 (rat): 10.00g/kg;   |
| <b>Acute Toxicity - Inhalation</b>                        | No data available   |
| <b>Acute Toxicity - Dermal</b>                            | No data available   |
| <b>Acute Toxicity - Eye</b>                               | No data available   |
| <b>Skin Corrosion/Irritation</b>                          | No data available   |
| <b>Serious Eye Damage/Irritation</b>                      | No data available   |
| <b>Respiratory or Skin Sensitization</b>                  | No data available   |
| <b>Germ Cell Mutagenicity</b>                             | Ursodeoxycholic Acid - Investigated as a teratogen, mutagen, and reproductive effector. Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information. Ursodeoxycholic Acid RTECS Number: FZ2000000 |
| <b>Carcinogenicity IARC</b>                               | No  |
| <b>Carcinogenicity ACGIH</b>                              | No data available.  |
| <b>Carcinogenicity NTP</b>                                | No  |
| <b>Carcinogenicity OSHA</b>                               | No  |
| <b>Reproductive Toxicity</b>                              | No data available   |
| <b>Specific Target Organ Toxicity - Single Exposure</b>   | No data available   |
| <b>Specific Target Organ Toxicity - Repeated Exposure</b> | No data available   |
| <b>Aspiration Hazard</b>                                  | No data available   |

## Section 12: Ecological Information

|                                      |   |
|--------------------------------------|---|
| <b>Toxicity</b>                      | Avoid release into the environment. Runoff from fire control or dilution water may cause pollution. |
| <b>Persistence and Degradability</b> | No data available   |
| <b>Bio-accumulative Potential</b>    | No data available   |
| <b>Mobility in Soil</b>              | No data available   |
| <b>Other Adverse Effects</b>         | No data available   |

## Section 13: Disposal Considerations

|  |   |
|--|---|
| <b>Waste Treatment Methods Product</b>               | Dispose in accordance with local, state, and federal regulations. |
| <b>Waste Treatment Methods Packaging</b>             | No data available   |
| <b>Special Precautions Landfill or Incinerations</b> | No data available   |
| <b>Other Information</b>                             | No data available   |

## Section 14: Transport Information

|                                   |                      |
|-----------------------------------|----------------------|
| <b>UN Number</b>                  | Not dangerous goods. |
| <b>UN Proper Shipping Name</b>    | N/A                  |
| <b>Transport Hazard Class(es)</b> | N/A                  |
| <b>Packaging Group</b>            | N/A                  |
| <b>Environmental Hazards</b>      | N/A                  |

## Section 15: Regulatory Information

European Community Hazard Symbol codes No data available. European Community Risk and Safety Phrases S24/25 - Avoid contact with skin and eyes. S37/39 - Wear suitable gloves and eye/face protection. US EPA SARA Title III Hazardous Components (Chemical Name) CAS # Sec.302 (EHS) Sec.304 RQ Sec.313 (TRI) Sec.110 Ursodeoxycholic acid 128-13-2 No No No No US EPA CAA, CWA, TSCA Hazardous Components (Chemical Name) CAS # EPA CAA EPA CWA NPDES EPA TSCA HPV/LPV Ursodeoxycholic acid 128-13-2 HAP, ODC () No No

## Section 16: Other Information

|                               |                  |
|-------------------------------|------------------|
| <b>Additional Information</b> | N/A              |
| <b>Prepared By</b>            | Scarlotte Smith  |
| <b>Revision Date</b>          | 02/06/2019 14:29 |

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