

TAUROCHOLIC ACID, SODIUM SALT (2,2,4,4-D4, 98%) Safety Data Sheet according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 14/05/2015 Revision date: Version: 1.0 :

DLM-9572

| SECTION 1: Identification of the subs | stance/mixture and of the company/undertaking | |
|---|--|--|
| 1.1. Product identifier | | |
| Product form | : Substance | |
| Substance name | : TAUROCHOLIC ACID, SODIUM SALT (2,2,4,4-D4, 98%) | |
| CAS No | : 252030-90-3 (Acid) | |
| Product code | : DLM-9572 | |
| Formula | : C26D4H40NO7SNa | |
| Synonyms | : 3alpha,7Beta-Dihydroxy-5Beta-cholan-24-oic acid N-(2sulfoethyl)amide / | |
| | Tauroursodeoxycholic acid sodium salt | |
| 1.2. Relevant identified uses of the substa | ance or mixture and uses advised against | |
| 1.2.1. Relevant identified uses | | |
| No additional information available | | |
| 1.2.2. Uses advised against | | |
| No additional information available | | |
| | | |
| 1.3. Details of the supplier of the safety de | ata sneet | |
| Cambridge Isotope Laboratories, Inc. 50 Frontage Road | | |
| Andover, MA 01810 | | |
| USA | | |
| USA: 1-800-322-1174 Int: 1-978-749-8000 cilsales@isotope.com www.isotope.com | | |
| Emergency telephone number | | |
| Emergency numbers: | | |
| Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours) | | |
| SECTION 2: Hazards identification | | |
| 2.1. Classification of the substance or min | xture | |
| Classification according to Regulation (EC) No | D. 1272/2008 [CLP] | |
| Not classified | | |
| | | |
| Classification according to Directive 67/548/EEC or 1999/45/EC | | |
| Not classified | | |
| Classification (GHS-US) | | |
| Classification (GHS-US) Not classified | | |
| | | |
| Adverse physicochemical, human health and environmental effects | | |
| No additional information available | | |
| | | |
| 2.2. Label elements | | |
| | | |
| No labeling applicable | Labeling according to Regulation (EC) No. 1272/2008 [CLP] | |
| | | |
| | | |
| GHS-US labeling | | |
| | | |
| No labeling applicable | | |
| | | |

2.3. **Other hazards**

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SECTION 3: Composition/information on ingredients

| 3.1. Substances | | | |
|---|---|-----|---|
| Name | Product identifier | % | Classification according to Directive 67/548/EEC |
| TAUROCHOLIC ACID, SODIUM SALT (2,2,4,4-D4, 98%) (Main constituent) | (CAS No) 252030-90-3 (Acid) (EC no) (EC index no) | 100 | Not classified |
| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| TAUROCHOLIC ACID, SODIUM SALT (2,2,4,4-D4, 98%) (Main constituent) | (CAS No) 252030-90-3 (Acid) (EC no) | 100 | Not classified |

Full text of R-, H- and EUH-phrases: see section 16

| Name | Product identifier | % | Classification (GHS-US) |
|---|-----------------------------|-----|-------------------------|
| TAUROCHOLIC ACID, SODIUM SALT (2,2,4,4-D4, 98%) (Main constituent) | (CAS No) 252030-90-3 (Acid) | 100 | Not classified |

Full text of H-phrases: see section 16

| 3.2. Mixtures | |
|--|---|
| Not applicable | |
| SECTION 4: First aid measures | |
| 4.1. Description of first aid measures | 5 |
| First-aid measures general | : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. |
| First-aid measures after inhalation | If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician. |
| First-aid measures after skin contact | : Wash with soap and plenty of water. Consult a physician. |
| First-aid measures after eye contact | : Flush eyes with water as a precaution. |
| First-aid measures after ingestion | : Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |
| 4.2. Most important symptoms and e | ffects, both acute and delayed |
| No additional information available | |
| 4.3. Indication of any immediate med | lical attention and special treatment needed |
| No additional information available | |
| SECTION 5: Firefighting measure | s |
| 5.1. Extinguishing media | 5 |
| suitable extinguishing media | : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. |
| C C | |
| 5.2. Special hazards arising from the Reactivity | : Not available. |
| , | . Not available. |
| 5.3. Advice for firefighters | |
| Firefighting instructions | : The product itself does not burn. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |
| SECTION 6: Accidental release m | easures |
| 6.1. Personal precautions, protective | equipment and emergency procedures |
| 6.1.1. For non-emergency personnel | |
| Emergency procedures | : Avoid dust formation. Avoid breathing vapors, mist or gas. |
| C1.2 For emergency responders | |
| 6.1.2. For emergency responders No additional information available | |
| | |
| 6.2. Environmental precautions | |
| Prevent entry to sewers and public waters. | |
| 6.3. Methods and material for contain | nment and cleaning up |
| For containment | : Sweep up and shovel. Keep in suitable, closed containers for disposal. |
| 6.4. Reference to other sections | |
| No additional information available | |

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| SECTION 7: Handling and storage | |
|---|--|
| 7.1. Precautions for safe handling | |
| Precautions for safe handling | : Provide good ventilation in process area to prevent formation of vapor. |
| Hygiene measures | : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. |
| 7.2. Conditions for safe storage, inclu- | ding any incompatibilities |
| Storage conditions | : Store in freezer (-20°C). Protect from light. |
| 7.3. Specific end use(s) | |
| No additional information available | |
| SECTION 8: Exposure controls/per | sonal protection |
| 8.1. Control parameters | |
| No additional information available | |
| | |
| 8.2. Exposure controls | |
| Personal protective equipment | : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus. |
| | |
| Hand protection | : Wear suitable protective clothing and gloves. |
| Eye protection | : Wear safety glasses with side shields (or goggles) and a face shield. |
| Skin and body protection | : Choose body protection according to the amount and concentration of the dangerous substance |
| Respiratory protection | at the work place. When appropriate, use NIOSH/CEN approved respirator. |
| | |
| SECTION 9: Physical and chemica | properties |
| 9.1. Information on basic physical and | |
| Physical state | : Solid |
| Appearance | : Solid. |
| Molecular mass | : 541.7 g/mol |
| Color | : white. |
| Odor | : No data available |
| Odor threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Self ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Log Pow | : No data available |
| Log Kow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Explosive limits | : No data available |
| 9.2. Other information | |

No additional information available

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|--|--|
| SECTION 10: Stability and reactivity | |
| 10.1. Reactivity | |
| Not available. | |
| 10.2. Chemical stability | |
| Stable if stored under recommended conditions. | |
| 10.3. Possibility of hazardous reactions | |
| No additional information available | |
| 10.4. Conditions to avoid | |
| Not available. | |
| 10.5. Incompatible materials | |
| Strong oxidizing agent. | |
| 10.6. Hazardous decomposition products | |
| Nitrogen oxides. carbon oxides. Sulphur oxides. | sodium oxides. |
| SECTION 11: Toxicological informat | ion |
| 11.1. Information on toxicological effects | |
| Acute toxicity | : Not classified |
| TAUROCHOLIC ACID, SODIUM SALT (2,2,4, | 4-D4, 98%) (252030-90-3 (Acid)) |
| LD50 oral rat | > 5000 mg/kg |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : Not classified |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |

| SECTI | ON 12: Ecological information | |
|-----------|--|--|
| 12.1. | Toxicity | |
| No addit | ional information available | |
| | | |
| 12.2. | Persistence and degradability | |
| No addit | ional information available | |
| 12.3. | Bioaccumulative potential | |
| No addit | ional information available | |
| 12.4. | Mobility in soil | |
| No addit | ional information available | |
| 12.5. | Results of PBT and vPvB assessment | |
| No addit | ional information available | |
| 12.6. | Other adverse effects | |
| No addit | ional information available | |
| SECTI | ON 13: Disposal considerations | |
| 13.1. | Waste treatment methods | |
| Regiona | l legislation (waste) : | Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations. |
| SECTI | ON 14: Transport information | |
| In accord | dance with ADR / RID / ADNR / IMDG / ICA | Ο / ΙΑΤΑ |

14.1. UN number

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| 14.2. UN proper shipping name | |
|--|---|
| 14.2. UN proper shipping name Not applicable Image: Comparison of the second | |
| Not applicable | |
| 14.3. Additional information | |
| Other information | : No supplementary information available. |
| | |
| Special transport precautions | : Not dangerous goods. |
| Overland transport | |
| Overland transport No additional information available | |
| | |
| Transport by sea | |
| No additional information available | |
| Air transport | |
| No additional information available | |
| | |
| 14.4. Environmental hazards | |
| Other information | : No supplementary information available. |
| 14.5. Special precautions for user | |
| Special transport precautions | : Not dangerous goods. |
| | |
| 14.6. Transport in bulk according to Ann | nex II of MARPOL 73/78 and the IBC Code |
| Not applicable | |
| SECTION 15: Regulatory informatio | n |
| 15.1. US Federal regulations | |
| No additional information available | |

| | 15.2. | International | I regulations |
|--|-------|---------------|---------------|
|--|-------|---------------|---------------|

| CANADA | |
|--|--|
| TAUROCHOLIC ACID, SODIUM SALT (2,2,4,4-D4, 98%) (252030-90-3 (Acid)) | |
| | Listed on the Canadian DSL (Domestic Substances List) inventory. |

15.2.1. National regulations

No additional information available

| 15.3. US State regulations | |
|---|---|
| TAUROCHOLIC ACID, SODIUM SALT (2,2,4,4-D4, 98%)(252030-90-3 (Acid)) | |
| State or local regulations | U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. |

| SECTION 16: Other inform | nation |
|--------------------------|--|
| Other information | : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound. |
| NFPA health hazard | : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials. |
| 16/05/2016 | EN (English US) 5/6 |

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| NFPA fire hazard | : 0 - Materials that will not burn. |
|------------------|--|
| NFPA reactivity | : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water. |
| HMIS III Rating | |
| Health | : 0 Minimal Hazard - No significant risk to health |
| Flammability | : 0 Minimal Hazard |
| Physical | : 0 Minimal Hazard |

CIL Multi-Solvent Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product