



| | (eviewed 0/1 03/14/2014 |
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| 1 Identification | |
| Product identifier | |
| Product name: <u>Tazobactam sodium</u> | |
| Stock number: J66226 CAS Number: | |
| 89785-84-2 Relevant identified uses of the substance or mixture and uses advised against. | |
| Identified use: SU24 Scientific research and development | |
| Details of the supplier of the safety data sheet Manufacturer/Supplier: | |
| Alfa Aesar | |
| Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099 | |
| Tel: 800-343-0660 Fax: 800-322-4757 | |
| Email: tech@alfa.com www.alfa.com | |
| Information Department: Health, Safety and Environmental Department | |
| Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866 |) 928-0789. |
| 2 Hazard(s) identification | |
| Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) | |
| The substance is not classified according to the Globally Harmonized System (GHS). Hazards not otherwise classified No information known. | |
| Label elements | |
| GHS label elements Not applicable Hazard pictograms Not applicable | |
| Signal word Not applicable Hazard statements Not applicable | |
| WHMIS classification Not [*] controlled Classification system | |
| HMIS ratings (scale 0-4) (Hazardous Materials Identification System) | |
| HEALTH I Health (acute effects) = 1 | |
| FIRE I Flammability = 1 REACTIVITY I Physical Hazard = 1 | |
| Other hazards | |
| Results of PBT and vPvB assessment PBT: Not applicable. | |
| vPvB: Not applicable. | |
| 3 Composition/information on ingredients | |
| Chemical characterization: Substances CAS# Description: | |
| 89785-84-2 Tazobactam sodium | |
| 4 First-aid measures | |
| Description of first aid measures After inhalation | |
| Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. | |
| After skin contact Immediately wash with water and soap and rinse thoroughly. | |
| Seek immédiate medical advice. | |
| After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. | |
| Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. | |
| Indication of any immediate medical attention and special freatment needed No further relevant information available. | |
| 5 Fire-fighting measures | |
| Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant i | foam. |
| Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: | |
| Carbon monoxide and carbon dioxide | |
| Sulfur oxides (SOx) Sodium oxide Nitrogen oxides (NOx) | |
| Advice for firefighters | |
| Protective equipment: Wear self-contained respirator. | |
| Wear fully protective impervious suit. | |
| 6 Accidental release measures | |
| Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. | |
| Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course. | |
| Methods and material for containment and cleaning up: Pick up mechanically. Prevention of secondary hazards: No special measures required. | |
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Product name: Tazobactam sodium

Reference to other sections See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling Precautions for safe handling Keep container tightly sealed. Information about protection against explosions and fires: No information known.

Conditions for safe storage, including any incompatibilities Storage

Requirements to be met by storerooms and receptacles: Refrigerate

Information about storage in one common storage facility: Protect from heat.

Store away from oxidizing agents. Further information about storage conditions:

Keep container tightly sealed. Refrigerate

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data

Exposure controls Personal protective equipment General protective ead hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves

Impervious gloves

Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Penetration time of glove material (in minutes) Not determined

Eye protection: Safety glasses Body protection: Protective work clothing.

9 Physical and chemical properties

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| Information on basic physical and che General Information Appearance: Form: Color: Odor: Odor: Odor threshold: | emical properties Powder White to off-white Not determined Not determined. |
| pH-value: | Not applicable. |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting: | 140-147 °C (284-297 °F) Not determined Not determined Not determined Not determined Not determined Not determined Not determined |
| Danger of explosion: Explosion limits: | Not determined. |
| Lower: Upper: Vapor pressure: Density: Relative density | Not determined Not determined Not applicable. Not determined Not determined. |
| Vapor density Evaporation rate | Not applicable. Not applicable. |
| Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): | Not determined |
| Viscosity: dynamic: | Not determined. |
| kinematic: Other information | Not applicable. No further relevant information available. |
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10 Stability and reactivity

Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Heat

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| Product name: Tazobactam sodium | | |
| Hazardous decomposition products: Carbon monoxide and carbon dioxide Sulfur oxides (SOx) Sodium oxide Nitrogen oxides | | (Contd. of page 2) |
| 11 Toxicological information Information on toxicological effects Acute toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this matter Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acuted | erial is available from the EPA, IARC, NTP, OSHA or ACGIH. vn. | |
| 12 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow undiluted product or large quantities to reach ground water, water Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available. | r course or sewage system. | |
| 13 Disposal considerations Waste treatment methods Recommendation Consult state, local or national regulations to ensure prope Uncleaned packagings: Recommendation: Disposal must be made according to official regulations. | r disposal. | |
| 14 Transport information | | |
| UN-Number DOT, ADN, IMDG, IATA | Not applicable | |
| UN proper shipping name DOT, ADN, IMDG, IATA | Not applicable | |
| Transport hazard class(es) | Νοι αρρησασιο | |
| DOT, ADR, ADN, IMDG, IATA Class | Not applicable | |
| Packing group | | |
| DOT, IMDG, IATA Environmental hazards: | Not applicable Not applicable. | |
| Special precautions for user | Not applicable. | |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Cod | | |
| Transport/Additional information: | | |
| DOT | | |
| Marine Pollutant (DOT): | No | |
| UN "Model Regulation": | - | |
| 15 Regulatory information Safety, health and environmental regulations/legislation specific for the s GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable National regulations This product is not listed in the U.S. Environmental Protection Agency Toxic S to research and development only. This product must be used by or directly ur product must not be used for commercial purposes or in formulations for comm This product is not listed on the Canadian Domestic Substances List (DSL) or SARA Section 313 (specific toxic chemical listings) Substance is not listed | ubstances Control Act Chemical Substance Inventory. Use of this p nder the supervision of a technically qualified individual as defined by nercial purposes. the Canadian Non-Domestic Substances List (NDSL). | roduct is restricted / TSCA. This |

This product is not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitations of use: For use only by technically qualified individuals. Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not listed. Substance is not listed. (Contd. on page 4)

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Product name: Tazobactam sodium

| Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out. | (Contd. of page 3) |
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| 16 Other information Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of sui information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. | ability of this product not in |
| Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Varkplace Hazardous Materials Information System (Canada) LC50: Lethal dose, 50 percent UD50: Lethal dose, 50 percent UD50: Lethal dose, 50 percent CAS: Chemical Adstracts and the deministration (USA) WTP: National Safety and Health Administration (USA) NTP: National Toxicology Program (USA) INTP: National Toxicology Program (USA) INTP: National Toxicology Program (USA) | 1154 |