

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: Product code:

L-Ribose R0068

Product use: Restrictions on use:

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

For laboratory research purposes. Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number: Chemical Emergencies: TCl America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) Responsible department: TCl America Environmental Health Safety and Security +1- 503-286-7624

2. HAZARD(S) IDENTIFICATION

| OSHA Haz Com: CFR 1910.1200: WHMIS 2015: | Not classifiable |
|---|------------------|
| Signal word: | None |
| Hazard Statement(s): | None |
| Pictogram(s) or Symbol(s): | None |
| Precautionary Statement(s): | None |
| Hazards not otherwise classified: [HNOC] | None. |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substance/mixture: | Substance |
|--------------------|--------------|
| Components: | L-Ribose |
| Percent: | >98.0%(HPLC) |
| CAS RN: | 24259-59-4 |
| Molecular Weight: | 150.13 |
| Chemical Formula: | C5H10O5 |

Skin and body protection:

| 4. FIRST-AID MEASURES | |
|--|---|
| | |
| Description of first aid measures Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical |
| Skin contact: | advice/attention if you feel unwell. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. |
| Eye contact: | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. |
| Ingestion: | Continue rinsing. If eye irritation persists: Get medical advice/attention. Get medical advice/attention if you feel unwell. Rinse mouth. |
| Symptoms/effects: | |
| Acute: Delayed: | No data available No data available |
| Delayeu. | No data available |
| ndication of any immediate medical attention of any immediate medical attention of available. | ention: |
| Notes to physician: | |
| No data available | |
| 5. FIRE-FIGHTING MEASURES | |
| Suitable extinguishing media: | Dry chemical, foam, water spray, carbon dioxide. |
| Hazardous combustion products: | These products include: Carbon oxides |
| Other specific hazards: | Closed containers may explode from heat of a fire. |
| Advice for firefighters: | Wear self-contained breathing apparatus if possible. |
| 6. ACCIDENTAL RELEASE MEASU | RES |
| Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: | Prevent product from entering drains. |
| 7. HANDLING AND STORAGE | |
| Precautions for safe handling: | Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. |
| | Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. |
| Conditions for safe storage, including a | ny incompatibilities |
| Storage conditions: | Keep container tightly closed. Store in a cool and dark place. Store under inert gas. Protect from moisture. |
| | Store away from incompatible materials such as oxidizing agents. |
| Packaging material: | Hygroscopic Comply with laws. |
| 8. EXPOSURE CONTROLS / PERSC | |
| ELECTOSORE CONTROLS / FERSE | MAL FROTECTION |
| Appropriate engineering controls: | Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. |
| Personal protective equipment | |
| Respiratory protection: | Dust respirator. Follow local and national regulations. |
| Hand protection: Eye protection: | Protective gloves. Safety glasses. A face-shield, if the situation requires. |
| Eye protection: Skin and body protection: | Protective clothing. Protective boots if the situation requires. |

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9. PHYSICAL AND CHEMICAL PROPERTIES

| 9. PHYSICAL AND CHEMICA | <u>AL PRO</u> | PERTIES | | |
|---|---------------|---|---|--|
| Physical state (20°C): Form: Colour: Odour: Odor threshold: Odour threshold: | | Solid Crystal - Powder White - Almost white No data available No data available No data available | | |
| Decomposition temperature:No data avRelative density:No data avKinematic viscosity:No data av | | (194°F) ta available ta available ta available ta available ta available | pH: Vapour pressure: Vapour density: Dynamic Viscosity: Evaporation rate(Butyl Acetate=1): | No data available No data available. No data available No data available No data available |
| | | o data available Autoignition tempera o data available Flammability or explo Lower: Upper: | | No data available No data available No data available |
| Solubility(ies): [Water] [Other solvents] | | Soluble No data available | | |
| 10. STABILITY AND REACT | IVITY | | | |
| Reactivity: Chemical stability: Possibility of hazardous reactions: Incompatible materials: Hazardous decomposition products: | | No data available Stable under proper conditions. No special reactivity has been reported. Oxidizing agents Carbon dioxide, Carbon monoxide | | |
| 11. TOXICOLOGICAL INFOR | RMATIO | N | | |
| Acute Toxicity: No data available Skin corrosion/irritation: No data available | | | | |
| Serious eye damage/irritation: No data available | | | | |
| Respiratory or skin sensitization No data available | n: | | | |
| Germ cell mutagenicity: No data available | | | | |
| Carcinogenicity: | | | | |

No data available

IARC: No data available

NTP: No data available

Reproductive toxicity: No data available

Target organ(s):

No data available

OSHA: No data available

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12. ECOLOGICAL INFORMATION

| Ecotoxicity: | |
|---------------------------------|---|
| Fish: | No data available |
| Crustacea: | No data available |
| Algae: | No data available |
| | |
| Persistence / degradability: | No data available |
| Bioaccumulative potential(BCF): | No data available |
| Mobility in soil | |
| Log Pow: | No data available |
| Soil adsorption (Koc): | No data available |
| Henry's Law (PaM ³/mol): | No data available |
| | |
| | |
| 13. DISPOSAL CONSIDERATIONS | |
| Disposal of product: | Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil. |
| Disposal of container: | Dispose of as unused product. |
| Other considerations: | Observe all federal, state and local regulations when disposing of the substance. |
| 14. TRANSPORT INFORMATION | |
| DOT (US) | Non-hazardous for transportation. |
| IATA | Non-hazardous for transportation. |
| IMDG | Non-hazardous for transportation. |

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

US Federal Regulations

| CERCLA Hazardo | | ce and Reportable Quantity: | |
|--------------------|------------|-----------------------------|-----------------|
| SARA 313: | | Not Listed | |
| SARA 302: | | Not Listed | |
| State Regulation | <u>s</u> | | |
| State Right-to-Kr | now | | |
| Massachuse | tts | Not Listed | |
| New Jersey | | Not Listed | |
| Pennsylvania | а | Not Listed | |
| California Propos | sition 65: | Not Listed | |
| Other Information | <u>n</u> | | |
| NFPA Rating: | | HMIS | Classification: |
| Health: | 0 | Hea | lth: 0 |
| Flammability: | 0 | Flar | mmability: 0 |
| Instability: | 0 | Phy | vsical: 0 |
| International Inve | entories_ | | |
| EC-No: | | 246-110-4 | |

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.