An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

Creation Date: 02-05-2025

Revision Date: 07-10-2030

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: L-Ribose, 98% Product Code: R 1330 CAS No : 24259-59-4

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email info@ottokemi.com

1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008
2.2 Label elements
Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008
2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

3.1 Substances Formula : C5H10O5 Molecular weight : 150,13 g/mol CAS-No. : 24259-59-4 No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first-aid measures If inhaled After inhalation: fresh air. In case of skin contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. In case of eye contact After eye contact: rinse out with plenty of water. Remove contact lenses. If swallowed After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 4.3 Indication of any immediate medical attention and special treatment needed No data available

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SECTION 5: Firefighting measures

5.1 Extinguishing media
Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.
5.2 Special hazards arising from the substance or mixture
Carbon oxides
5.3 Advice for firefighters
In the event of fire, wear self-contained breathing apparatus.
5.4 Further information
Prevent fire extinguishing water from contaminating surface water or the ground water system.
SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger

area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions Do not let product enter drains.

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid

generation of dusts. 6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Storage conditions
Tightly closed. Dry.
Storage stabilityRecommended storage temperature
2 - 8 °C
Storage class
Storage class (TRGS 510): 11: Combustible Solids
7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

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Respiratory protection required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P1 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains.		
SECTION 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties a) Physical state b) Color c) Odor d) Melting point/freezing point e) Initial boiling point and boiling range f) Flammability (solid, gas) g) Upper/lower flammability or explosive limits h) Flash point i) Autoignition temperature k) pH l) Viscosity m) Water solubility n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing premoting	powder white No data available Melting point/ range: 81 - 82 °C - lit. No data available No data available No data available No data available No data available No data available Viscosity, kinematic: No data available Viscosity, kinematic: No data available Viscosity, kinematic: No data available No data available	
 t) Oxidizing properties 9.2 Other safety information No data available SECTION 10: Stability and reactivity 10.1 Reactivity No data available 10.2 Chemical stability The product is chemically stable under standard ambient co 10.3 Possibility of hazardous reactions No data available 10.4 Conditions to avoid no information available 10.5 Incompatible materials Strong oxidizing agents 10.6 Hazardous decomposition products 	No data available nditions (room temperature) .	

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In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on Other Toxic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity No data available		
12.2 Persistence and degradability		
No data available		
12.3 Bioaccumulative potential		
No data available		
12.4 Mobility in soil		
No data available		
12.5 Results of PBT and vPvB assessment		
PBT/vPvB assessment not available as chemical safety as	sessment not required/not	
conducted		
12.6 Endocrine disrupting properties		
No data available		
12.7 Other adverse effects		
No data available		
SECTION 13: Disposal considerations		
13.1 Waste treatment methods		
No data available		
SECTION 14: Transport information		
14.1 UN number		
ADR/RID: -	IMDG: -	IATA: -
14.2 UN proper shipping name	INDO.	0.0173.
ADR/RID : Not dangerous goods		
IMDG : Not dangerous goods		
IATA : Not dangerous goods		
14.3 Transport hazard class(es)		
ADR/RID: -	IMDG: -	IATA: -
	IMDG	IATA
14.4 Packaging group	IMPO	14 7 4
ADR/RID: -	IMDG: -	IATA: -
14.5 Environmental hazards		
ADR/RID: no	IMDG Marine pollutant: no	IATA: no
14.6 Special precautions for user		
No data available		
Further information		
Not classified as dangerous in the meaning of transport reg		
14.7 Maritime transport in bulk according to IMO instrumen	ts	
Not applicable for product as supplied.		
SECTION 15: Regulatory information	in the first the	

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This material safety data sheet complies with the requirements of Regulation (EC) No.

1907/2006.

International Chemical Weapons Convention

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(CWC) Schedules of Toxic Chemicals and Precursors

Restrictions on the marketing and use of certain dangerous substances and preparations

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Candidate List of Substances of Very High Concern for Authorisation

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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