

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product Name: 2-Deoxy-D-ribose

Synonyms: Deoxyribose; Thyminose; D-erythro-Pentose, 2-deoxy-

CAS No.: 533-67-5

Molecular Formula: C₅H₁₀O₄

Molecular Weight: 134.13 g/mol

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: Laboratory chemical, research use only.

Uses Advised Against: Not for food, drug, pesticide, biocidal, or household use.

1.3 Details of the supplier of the safety data sheet

Company Name: Qingdao Sigma Chemical Co., Ltd.

Address: Room 2-1-2301, Jiahe Xinxing, No. 130, Shandong Road, Shibei District, Qingdao City, Shandong Province

Email: 786099005@qq.com

1.4 Emergency telephone number

Emergency Contact: Local emergency services or poison control center.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification: Not classified as hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200) or GHS.

2.2 Label elements

GHS Signal Word: None

Hazard Statements: None

Precautionary Statements: None

2.3 Other hazards

Hazards Not Otherwise Classified (HNOC): None identified.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical Name: 2-Deoxy-D-ribose

CAS No.: 533-67-5

Concentration: $\geq 98\%$

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye Contact: Rinse immediately with plenty of water for at least 15 minutes.

Seek medical attention if irritation persists.

Skin Contact: Wash with soap and water. Remove contaminated clothing.

Seek medical attention if irritation occurs.

Inhalation: Move to fresh air. Seek medical attention if symptoms develop.

Ingestion: Rinse mouth with water. Do not induce vomiting. Seek medical attention if symptoms occur.

4.2 Most important symptoms and effects

Symptoms: No significant symptoms reported.

4.3 Notes to physician

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water spray, dry chemical, CO₂, or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

Combustion Products: Carbon monoxide (CO), carbon dioxide (CO₂).

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective gear.

SECTION 6: Accidental release measures

6.1 Personal precautions

Avoid dust formation. Ensure adequate ventilation.

6.2 Environmental precautions

Prevent release into drains or environment.

6.3 Methods for containment and cleaning up

Sweep up and collect in suitable containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin, eyes, and clothing. Avoid dust formation.

7.2 Conditions for safe storage

Store in a cool, dry, well-ventilated place. Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No occupational exposure limits established.

8.2 Exposure controls

Eye Protection: Safety goggles.

Skin Protection: Wear gloves and lab coat.

Respiratory Protection: Use dust mask if handling large quantities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: White to off-white powder.

Odor: Odorless.

Melting Point: ~91 °C.

Solubility: Soluble in water.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Conditions to avoid

Strong oxidizing agents, excess heat.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

No significant acute or chronic toxicity reported.

SECTION 12: Ecological information

12.1 Ecotoxicity

Avoid release into the environment.

SECTION 13: Disposal considerations

13.1 Waste disposal methods

Dispose in accordance with local regulations.

SECTION 14: Transport information

14.1 Transport regulations

Not classified as hazardous for transport.

SECTION 15: Regulatory information

15.1 Safety, health, and environmental regulations

Listed in major chemical inventories.

SECTION 16: Other information

16.1 Revision date

[Date of preparation]

16.2 Disclaimer

The information provided is accurate to the best of our knowledge. Users should verify suitability for their specific purposes.