

BERRY & ASSOCIATES/ICON ISOTOPES

Safety Data Sheet 1-Deoxy-D-ribose

SECTION 1: Identification

1.1 Product identifier

Product name	1-Deoxy-D-ribose
Product number	CR 2045
Brand	Berry&Associates
Substance name	1,4-Anhydro-D-ribitol
CAS no.	51607-76-2

1.3 Recommended use of the chemical and restrictions on use

Laboratory chemicals; Manufacture of substance

1.4 Supplier's details

Name	Berry & Associates/ICON Isotopes
Address	2434 Bishop Circle East Dexter, MI 48130 USA
Telephone	734-426-3787
email	alchem@berryassoc.com

1.5 Emergency phone number(s)

USA /Canada 800-424-9300
All else 703-527-3887

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Acute toxicity, oral (chapter 3.1), Cat. 5
- Acute toxicity, dermal (chapter 3.1), Cat. 5
- Eye damage/irritation (chapter 3.3), Cat. 2B
- Acute toxicity, inhalation (chapter 3.1), Cat. 5

2.2 GHS label elements, including precautionary statements

Hazard statement(s)

H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H320	Causes eye irritation
H333	May be harmful if inhaled

Safety Data Sheet

1-Deoxy-D-ribose

Precautionary statement(s)

P312

P264

P305+P351+P338

P337+P313

P304+P312

Call a POISON CENTER/doctor if you feel unwell.

Wash hands thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF INHALED: Call a POISON CENTER/doctor/.../if you feel unwell.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	1,4-Anhydro-D-ribitol
CAS no.	51607-76-2
Formula	C ₅ H ₁₀ O ₄
Molecular weight	134.06

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Move to fresh air. Get medical attention if symptoms occur.
In case of skin contact	Wash skin with soap and water.
In case of eye contact	Immediately flush eyes with water for at least 15 minutes. Get medical attention if symptoms occur.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Solid water stream may be inefficient.

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus if necessary and full protective gear to prevent contact with skin and eyes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid raising and breathing dust, provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus and appropriate personal protection (safety goggles, heavy rubber gloves and rubber boots).

6.2 Environmental precautions

Take measures to avoid release into the environment, do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spill and collect as appropriate. Transfer to chemical waste container in accordance with local regulations.

Safety Data Sheet

1-Deoxy-D-ribose

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation for dust, fume, gas, mist, vapors and spray. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and in a dry, well-ventilated cool area.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Use industrial hygiene practices to control hazardous materials.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses

Skin protection

Chemical-resistant gloves

Respiratory protection

NIOSH approved respirator, as conditions warrant.

Environmental exposure controls

Do not let material enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Colorless solid
Odor	No data available.
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	Soluble in water, MeOH and EtOH
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

Safety Data Sheet

1-Deoxy-D-ribose

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

Information on toxicological effects

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.

Germ cell mutagenicity

No data available.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or known carcinogen by OSHA.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

Safety Data Sheet

1-Deoxy-D-ribose

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

SECTION 12: Ecological information

Toxicity

No data available.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

SECTION 13: Disposal considerations

Disposal of the product

Dispose in accordance with local, state and federal regulations.

Disposal of contaminated packaging

Dispose in accordance with local, state and federal regulations.

SECTION 14: Transport information

DOT (US): Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards

No SARA hazards.

SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SECTION 16: Other information

16.1 Further information/disclaimer

The Information in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use.

The information given in the Safety Data Sheet is designed only as guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Users should make independent decisions regarding completeness of information based on all sources available. Berry & Associates, Inc. shall not be held liable for any damage resulting from handling or contact with the above product.