# 1-O-Methyl-2-deoxy-D-ribose

## sc-255854





The Power to Question

Hazard Alert Code Key:

EXTREME

HIGH

**MODERATE** 

LOW

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## PRODUCT NAME

1-O-Methyl-2-deoxy-D-ribose

## STATEMENT OF HAZARDOUS NATURE

Not considered a hazardous substance according to OSHA 29 CFR 1910.1200.

# NFPA



## **SUPPLIER**

Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800

## **EMERGENCY**

ChemWatch

Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

# **SYNONYMS**

C6-H12-O4

## **Section 2 - HAZARDS IDENTIFICATION**

## **CHEMWATCH HAZARD RATINGS**

		Min	Max
Flammability	1		
Toxicity	0		
Body Contact	0		
Reactivity	1		
Chronic	0		

Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

## **CANADIAN WHMIS SYMBOLS**

None

# **EMERGENCY OVERVIEW**

**RISK** 

#### **POTENTIAL HEALTH EFFECTS**

#### **ACUTE HEALTH EFFECTS**

#### **SWALLOWED**

■ The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion".

This is because of the lack of corroborating animal or human evidence.

#### FVE

■ Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

#### SKIN

■ The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models).

Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

- Open cuts, abraded or irritated skin should not be exposed to this material.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.

Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

#### **INHALED**

■ The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).

Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

■ Inhalation hazard is increased at higher temperatures.

#### **CHRONIC HEALTH EFFECTS**

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS					
NAME	CAS RN	%			
1-O-methyl-2-deoxy-D-ribose	60134-26-1	>98			

#### **Section 4 - FIRST AID MEASURES**

#### **SWALLOWED**

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

#### EYE

If this product comes in contact with eyes

- · Wash out immediately with water.
- If irritation continues, seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### SKIN

If skin or hair contact occurs

- Flush skin and hair with running water (and soap if available).
- · Seek medical attention in event of irritation.

#### **INHALED**

- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

## **NOTES TO PHYSICIAN**

■ Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES				
Vapor Pressure (mmHG)	Not available			
Upper Explosive Limit (%)	Not available.			
Specific Gravity (water=1)	1.224			
Lower Explosive Limit (%)	Not available			

## **EXTINGUISHING MEDIA**

- Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).

## **FIRE FIGHTING**

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use water delivered as a fine spray to control fire and cool adjacent area.

## GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Combustible.
- Slight fire hazard when exposed to heat or flame.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

Combustion products include carbon dioxide (CO2), other pyrolysis products typical of burning organic material.

#### FIRE INCOMPATIBILITY

 Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result

#### Section 6 - ACCIDENTAL RELEASE MEASURES

## **MINOR SPILLS**

- Remove all ignition sources.
- · Clean up all spills immediately.
- Avoid breathing vapors and contact with skin and eyes.
- · Control personal contact by using protective equipment.

#### **MAJOR SPILLS**

Moderate hazard.

- · Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- · Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.

## **Section 7 - HANDLING AND STORAGE**

#### PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- · Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

## RECOMMENDED STORAGE METHODS

- Metal can or drum
- Packaging as recommended by manufacturer.

Check all containers are clearly labelled and free from leaks.

#### STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.

#### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **EXPOSURE CONTROLS**

The following materials had no OELs on our records

• 1-O-methyl-2-deoxy-D-ribose CAS60134-26-1

#### PERSONAL PROTECTION







#### **RESPIRATOR**

• Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 1432000 & 1492001, ANSI Z88 or national equivalent)

#### EYE

- · Safety glasses with side shields
- · Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

#### HANDS/FEET

Wear general protective gloves, eg. light weight rubber gloves.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include

- frequency and duration of contact.
- chemical resistance of glove material.
- glove thickness and
- dexterity
- Neoprene gloves

#### **OTHER**

No special equipment needed when handling small quantities.

#### **OTHERWISE**

- Overalls.
- Barrier cream.
- · Eyewash unit.

## **ENGINEERING CONTROLS**

■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are

Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

## **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

## **PHYSICAL PROPERTIES**

Liquid.

Mixes with water.

State	Liquid	Molecular Weight	148.16
Melting Range (°F)	Not available	Viscosity	Not Available
Boiling Range (°F)	Not available	Solubility in water (g/L)	Miscible
Flash Point (°F)	>230	pH (1% solution)	Not available
Decomposition Temp (°F)	Not available	pH (as supplied)	Not applicable
Autoignition Temp (°F)	Not available	Vapor Pressure (mmHG)	Not available
Upper Explosive Limit (%)	Not available.	Specific Gravity (water=1)	1.224
Lower Explosive Limit (%)	Not available	Relative Vapor Density (air=1)	>1
Volatile Component (%vol)	Not available	Evaporation Rate	Not available

#### **APPEARANCE**

Viscous liquid; mixes with water.

## **Section 10 - CHEMICAL STABILITY**

## **CONDITIONS CONTRIBUTING TO INSTABILITY**

- · Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

## STORAGE INCOMPATIBILITY

! Avoid contamination of water, foodstuffs, feed or seed.

· Avoid reaction with oxidizing agents

For incompatible materials - refer to Section 7 - Handling and Storage.

# **Section 11 - TOXICOLOGICAL INFORMATION**

1-O-methyl-2-deoxy-D-ribose

#### **TOXICITY AND IRRITATION**

■ No significant acute toxicological data identified in literature search.

## **Section 12 - ECOLOGICAL INFORMATION**

No data

## **Section 13 - DISPOSAL CONSIDERATIONS**

### **Disposal Instructions**

All waste must be handled in accordance with local, state and federal regulations.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- · Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first
- Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- · Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

## **Section 14 - TRANSPORTATION INFORMATION**

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

#### **Section 15 - REGULATORY INFORMATION**

No data for 1-O-methyl-2-deoxy-D-ribose (CAS: , 60134-26-1)

## **Section 16 - OTHER INFORMATION**

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- Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.
- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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