



Version: 1.0

Revision date: 06.12.2019

# **Safety Data Sheet**

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

#### 1.1 Product identifier

Trade name/designation: D(-)-Mannitol laboratory reagent

Product No.: M0295 Synonymes: none CAS No. 69-65-8

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

Relevant identified uses: General chemical reagent

# 1.3 Details of the supplier of the safety data sheet

## **Supplier**

**Avantor Performance Materials India Ltd.** 

Street 501, 5th floor, Tiffany Building, Hiranandani Business Park,

Postal code/city Thane, Maharashtra - 400607, India

Telephone 022-41288100

**Emergency phone number** 

Telephone 1800105561

**Preparation Information** 

**Product Information Compliance** 

1.4 E-mail SDS@avantorsciences.com

## **SECTION 2: Hazard identification**

#### 2.1 Classification of the substance or mixture

The substance is classified as not hazardous.

#### 2.2 Label elements

The product does not have to be labelled.

# 2.3 Other hazards not applicable





# **SECTION 3: Composition / information on ingredients**

#### **Substances**

Substance name D(-)-Mannitol

Molecular formula  $HOH_2C(CH(OH))_4CH_2OH$ 

Molecular weight 182.17 g/mol CAS No. 69-65-8

#### **SECTION 4: First aid measures**

#### 4.1 General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

#### After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

#### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

## After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

## In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

#### 4.2 Most important symptoms and effects, both acute and delayed

no data available

#### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

no data available

# **SECTION 5: Firefighting measures**

# 5 1 Extinguishing media

#### Suitable extinguishing media

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

# Extinguishing media which must not be used for safety reasons

no restriction

#### 5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2)





#### 5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

#### 5.4 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses.

Do not inhale explosion and combustion gases.

Use water spray jet to protect personnel and to cool endangered containers.

In case of fire: Evacuate area.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

## 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

#### 6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated articles and floor according to the environmental legislation. Collect in closed and suitable containers for disposal.

## 6.4 Additional information

Clear spills immediately.

# **SECTION 7: Handling and storage**

#### Precautions for safe handling

All work processes must always be designed so that the following is as low as possible:

Inhalation

skin contact

Eye contact

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Usual measures for fire prevention.

Handle under (Gas):

Protective gas, dry

#### Conditions for safe storage, including any incompatibilities

Recommended storage temperature: Store in a tightly closed container.

Keep container tightly closed and in a well-ventilated place.

#### Specific end use(s)

no data available

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.





## 8.2 Exposure controls

# Appropriate engineering controls

no data available

# Personal protection equipment

no data available

Eye/face protection no data available

Skin protection no data available

# By short-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm
Breakthrough time (maximum wearing > 480 min time):

# By long-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,38 mm
Breakthrough time (maximum wearing > 480 min time):

Respiratory protection no data available

Additional information no data available

Environmental exposure controls no data available





# **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

(a) Appearance

Physical state: solid Colour: white

(b) Odour: no data available (c) Odour threshold: no data available

## Safety relevant basic data

(d) pH: 5-7 (100 g/l; H2O; 20 °C)

(e) Melting point/freezing point: 164-169 °C

(f) Initial boiling point and boiling range: 290-295 °C (4 hPa) (g) Flash point: no data available (h) Evaporation rate: no data available (i) Flammability (solid, gas): not applicable

(j) Flammability or explosive limits

Lower explosion limit:

Upper explosion limit:

(k) Vapour pressure:

(l) Vapour density:

no data available

no data available

no data available

1.49 g/cm³ (20 °C)

(n) Solubility(ies)

Water solubility (g/L): 213 g/l (25 °C)
Soluble (g/L) in Ethanol: no data available

(o) Partition coefficient: n-octanol/water: -3.1 (20 °C)

(p) Auto-ignition temperature: 410 °C

(q) Decomposition temperature: no data available

(r) Viscosity

Kinematic viscosity:
Dynamic viscosity:
no data available
no data available
not applicable
not applicable

# 9.2 Other information

Bulk density:

Refraction index:

Dissociation constant:

Surface tension:

Henry's Law Constant:

no data available

no data available

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 conditions (room temperature).





#### 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**

# 11.1 Information on toxicological effects

#### **Acute effects**

Acute oral toxicity:

LD50: 13500 mg/kg - Rat - (National Library of Medicine ChemID Plus (NLM CIP))

Acute dermal toxicity:

no data available

Acute inhalation toxicity:

no data available

#### Irritant and corrosive effects

Primary irritation to the skin:

not applicable

Irritation to eyes:

not applicable

Irritation to respiratory tract:

not applicable

## Respiratory or skin sensitisation

In case of skin contact: not sensitising

After inhalation: not sensitising

## STOT-single exposure

not applicable

# STOT-repeated exposure

not applicable

# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Carcinogenicity

#### Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

#### Reproductive toxicity

No indications of human reproductive toxicity exist.





#### **Aspiration hazard**

not applicable

#### Other adverse effects

no data available

# **SECTION 12: Ecological information**

# 12.1 Ecotoxicity

#### Fish toxicity:

no data available

#### Daphnia toxicity:

no data available

#### Algae toxicity:

no data available

# **Bacteria toxicity:**

no data available

# 12.2 Persistence and degradability

no data available

#### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: -3.1 (20 °C)

# 12.4 Mobility in soil:

no data available

# 12.5 Results of PBT/vPvB assessment

no data available

#### 12.6 Other adverse effects

no data available

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Appropriate disposal / Product**

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal.

#### Appropriate disposal / Package

Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

# **SECTION 14: Transport information**

# Land transport (ADR/RID)

No dangerous good in sense of this transport regulation.





# Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

# Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.





## **SECTION 15: Regulatory information**

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **SECTION 16: Other information**

#### Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

AGS - Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)

CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures

DFG - German Research Foundation (Deutsche Forschungsgemeinschaft)

Gestis - Information system on hazardous substances of the German Social Accident Insurance

(Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung)

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

RID - Regulation concerning the International Carriage of Dangerous Goods by Rail

STV - Short Term Value

SVHC - Substances of Very High Concern

vPvB - very Persistent, very Bioaccumulative

#### **Additional information**

Indication of changes: none

#### **Disclaimer**

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, AVANTOR PERFORMANCE MATERIALS ("AVANTOR") EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of Avantor's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, AVANTOR DISCLAIMS LIABILITY FOR, AND BY USING AVANTOR'S PRODUCTS THE PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL AVANTOR BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGE OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.