

1 Identification of substance:

- **Product name:** *Rhamnose*
- **Catalog number:** *217520*
- **Manufacturer/Supplier:**
*BD Diagnostic Systems
7 Loveton Circle
Sparks, MD 21152
Tel: (410) 771-0100 or (800) 638-8663*
- **Information department:** *Technical Services*
- **Emergency information:**
In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems at (410)771-0100 or (800)638-8663, or ChemTrec at (800)424-9300.

2 Composition/Data on components:

- **Chemical characterization:**
- **CAS No. Description:**
Not applicable

3 Hazards identification

- **Hazard description:**
This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, and 93/112/EC.
- **NFPA ratings (scale 0-4)**



Health = 0
Fire = 0
Reactivity = 0

4 First aid measures

- **General information** *No special measures required.*
- **After inhalation** *Seek medical treatment in case of complaints.*
- **After skin contact** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** *If symptoms persist consult doctor.*
- **Information for doctor** *Show this product label or this MSDS.*

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.

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· **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Wipe up with damp sponge or mop.
- **Measures for cleaning/collecting:** No special measures required.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** < 30 C
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal Protective Equipment**
- **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Chemical resistant gloves (i.e. nitrile, or equivalent).

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

9 Physical and chemical properties:

· **General Information**

Form:	Solid. Powder
Color:	According to product specification
Odor:	Characteristic

· **Change in condition** Undetermined

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- | | |
|---|--|
| · Melting point/Melting range: | <i>Not determined</i> |
| · Boiling point/Boiling range: | <i>Not determined</i> |
| · Flash point: | <i>Not applicable</i> |
| · Auto igniting: | <i>Product is not self igniting.</i> |
| · Danger of explosion: | <i>Product does not present an explosion hazard.</i> |
| · Density: | <i>Not determined</i> |
| · Solubility in / Miscibility with | |
| Water: | <i>Soluble</i> |
| Organic solvents: | <i>0.0 %</i> |
| · Solids content: | <i>100.0 %</i> |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Materials to be avoided:** *Incompatible material: strong oxidizers.*
- **Dangerous reactions** *No dangerous reactions known*
- **Dangerous products of decomposition:** *No dangerous decomposition products known.*

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** *No irritating effect.*
- **on the eye:** *No irritating effect.*
- **Sensitization:** *No sensitizing effects known.*
- **Additional toxicological information:**
The product is not subject to OSHA classification according to internally approved calculation methods for preparations.
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information:

- **Ecotoxicological effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** *Generally not hazardous for water.*

13 Disposal considerations

- **Product:**
- **Recommendation**
Smaller quantities can be disposed of with solid waste.

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Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.

This product is not considered a RCRA hazardous waste.

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

- **Transport/Additional information:**

If a dashed line appears in the Hazard Class section for the type of transportation, this indicates the product is not regulated for transportation. However, if a Hazard Class Number is listed the product is regulated.

15 Regulations

- **SARA Section 355 (extremely hazardous substances)**
Substance is not listed.
- **SARA Section 313 (specific toxic chemical listings)**
Substance is not listed.
- **TSCA (Toxic Substances Control Act)**
Substance is listed.
- **California Proposition 65 - Chemicals known to cause cancer**
Substance is not listed.
- **California Proposition 65 - Chemicals known to cause reproductive toxicity for females:**
Substance is not listed.
- **California Proposition 65 - Chemicals known to cause reproductive toxicity for males:**
Substance is not listed.
- **California Proposition 65 - Chemicals known to cause developmental toxicity:**
Substance is not listed.
- **Carcinogenicity categories**
- **IARC (International Agency for Research on Cancer)**
Substance is not listed.

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· NTP (National Toxicology Program)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· Product related hazard information:

Observe the general safety regulations when handling chemicals

The substance is not subject to classification according to the sources of literature known to us.

The product is not subject to identification regulations pertaining to regulations on hazardous materials.

· National regulations

· Water hazard class: *Generally not hazardous for water.*

16 Other information:

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

· Department issuing MSDS: *Safety and Environment Department*

· Contact: *Technical Service Representative*