

Date Prepared: 03/27/2014 Reviewed On: 03/27/2014

1 Identification

· Product Identifier

Product Name: <u>D-Galactose</u>
 Catalog Number: 216310

· CAS Number:

59-23-4

· EC number:

200-416-4

- · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture In-vitro Diagnostics
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

BD Diagnostic Systems

7 Loveton Circle

Sparks, MD 21152

Telephone: (410) 771 - 0100 or (800) 638 – 8663 Email Address: Technical Services @bd.com

- · Information Department: Technical Service
- · Emergency telephone number:

In case of a chemical emergency, spill, fire, exposure, or accident, contact BD Diagnostic Systems (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

2 Hazard(s) identification

- · Classification of the substance or mixture

 The substance is not classified according to the Globally Harmonized System (GHS).
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC
 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, the Canada's Workplace Hazardous Materials Information System (WHMIS) and the European Directive 67/548/EEC and 1999/45/EC.
- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · NFPA ratings (scale 0-4)



Health = 0 Flammability = 0 Reactivity = 0

(Contd. on page 2)



Reviewed On: 03/27/2014 Date Prepared: 03/27/2014

Product Name: D-Galactose

· HMIS ratings (scale 0-4)

(Contd. of page 1)



 \bigcirc Health = 0 \bigcirc Flammability = 0 REACTIVITY \bigcirc Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description:

59-23-4 galactose, pure

- Identification number(s):
- · EC number: 200-416-4

4 First-aid measures

- Description of 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 eve contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a

- · After swallowing If symptoms persist consult doctor.
- · Information for doctor Show this product label or this MSDS.
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents

CO2, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)



Date Prepared: 03/27/2014 Reviewed On: 03/27/2014

Product Name: D-Galactose

(Contd. of page 2)

- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Wipe up with damp sponge or mop.
- · Methods and material for containment and cleaning up: No special measures required.
- · Reference to other sections No dangerous substances are released.

7 Handling and storage

- · Handling
- · Precautions for safe handling No special measures required.
- Information about protection against explosions and fires:
 No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: < 30 $^{\circ}$ C
- · Information about storage in one common storage facility: Store away from oxidizing agents.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems:
- No further data; see Section 7.
- · Control parameters
- · 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.
- · Exposure controls
- · 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

(Contd. on page 4)



Date Prepared: 03/27/2014 Reviewed On: 03/27/2014

Product Name: D-Galactose

· Body protection: Protective work clothing (lab coat).

(Contd. of page 3)

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solid.

Powder

Color: Beige

· Odor: Characteristic

Change in condition
 Melting point/Melting range:
 Boiling point/Boiling range:
 Not determined

· Flash point: Not applicable

· Flammability (solid, gaseous) Product is not flammable.

Danger of explosion: Product does not present an explosion hazard.

· **Density:** Not determined

· Solubility in / Miscibility with

Water: Insoluble

Solids content: 100.0 %

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritating effect.

(Contd. on page 5)



Date Prepared: 03/27/2014 Reviewed On: 03/27/2014

Product Name: D-Galactose

(Contd. of page 4)

· 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.

The substance is not subject to classification.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Other information:

The ecological effects have not been thoroughly investigated, but currently none have been identified

- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Smaller quantities can be disposed of with solid waste.

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.

(Contd. on page 6)



Date Prepared: 03/27/2014 Reviewed On: 03/27/2014

Product Name: D-Galactose

(Contd. of page 5)

· Recommended cleansing agent: Water, if necessary with cleansing agents.

· UN-Number	
· DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· DOT, ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	If a "void" appears in the Hazard Class sect for the type of transportation, this indicates to product is not regulated for transportation.
· UN "Model Regulation":	-

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · 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.

(Contd. on page 7)



Date Prepared: 03/27/2014 Reviewed On: 03/27/2014

Product Name: D-Galactose

(Contd. of page 6)

 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.

- · Carcinogenic categories
- · TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · National regulations
- · Water hazard class: Generally not hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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 can not guarantee that these are the only hazards that exist.

Department issuing MSDS:

Environmental, Health & Safety Created by Michael J. Spinazzola

- · Contact: Technical Service Representative
- · Date of preparation / last revision 03/27/2014 / -
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

(Contd. on page 8)



Date Prepared: 03/27/2014 Reviewed On: 03/27/2014

Product Name: D-Galactose

(Contd. of page 7)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

US