



SECTION 1 - Chemical Product and Company Identification

1.1 Product Identifiers

Product Name : D-Galactose
 CAS# : 59-23-4
 EC# : 200-416-4
 RTECS# : LW5490000

1.2 Recommended Use of the Chemical and Restrictions of Use

Chemical manufacturing

1.3 Company Identification

Supplier BioSpectra, Inc.
 100 Majestic Way
 Bangor, PA 18013
 T: 610.599.3400
ra@biospectra.us

1.4 Emergency Numbers

Emergency Numbers: US & Canada: 1-800-424-9300
 Outside the US & Canada: +1-703-527-3887

SECTION 2 – Hazards Identification

2.1 Classification of Substance or Mixture

Not a hazardous substance or mixture.

2.2 GHS Label Elements Including Precautionary Statements

Not a hazardous substance or mixture.

2.3 Hazards Not Classified or not Covered by the GHS

This substance is not considered to be persistent, bio accumulating nor toxic (PBT).

SECTION 3 – Composition, Information on Ingredients

Component	Classification	Concentration
D-Galactose	NA	-

Synonyms : D-Galactopyranose, D-Galactopyranoside
 Molecular Formula : C₆H₁₂O₆
 Molecular Weight : 180.16 g/mol
 CAS# : 59-23-4
 EC# : 200-416-4

SECTION 4 - First Aid Measures

4.1 Description of Necessary First Aid Measures

Eyes	:	Flush eyes with plenty of water for at least 15 minutes, lifting lower and upper lids Get medical aid if irritation develops.
Skin	:	Wash with plenty of soap and water for at least 15 minutes. Get medical aid if irritation develops or persists.
Ingestion	:	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If the victim is conscious, rinse out mouth with water. Get medical attention.
Inhalation	:	Remove to fresh air. If not breathing give artificial respiration.

4.2 Most Important Symptoms/Effects, Acute and Delayed

Refer to Section 2.2 for Precautionary Statements if any are applicable.

4.3 Indication of Immediate Medical Attention and Special Treatment

Not Available

SECTION 5 - Firefighting Measures

5.1 Extinguishing Media

In case of fire, use water spray, alcohol resistant foam, dry chemical, or Carbon Dioxide.

5.2 Hazardous Decomposition Products

Carbon Oxides

5.3 Special Equipment/Precautions for Firefighters

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Explosion will appear as fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.4 Other Information

Not Available

SECTION 6 - Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use proper Personal Protective Equipment as indicated in Section 8. Avoid dust and aerosol formation. Avoid breathing dust, vapors, mist or gas.

6.2 Environmental Precautions

Do not allow to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Sweep up and shovel. Keep in suitable closed containers for disposal.

6.4 Other Information

See disposal notes in section 13.

SECTION 7 - Handling and Storage

7.1 Precautions for Safe Handling

Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for Storage Including any Incompatibilities

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

7.3 Other Information

None available

SECTION 8 - Exposure Controls, Personal Protection

8.1 Control Parameters

Chemical does not contain any substances with occupational exposure limits.

8.2 Engineering Controls

Use adequate ventilation to keep airborne concentrations low.

8.3 Personal Protective Equipment

Eyes

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin

Wear appropriate protective gloves to prevent skin exposure. Wear impervious gloves. Nitrile rubber with layer thickness 0.11 mm. gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Clothing

Wear appropriate protective clothing to prevent skin exposure.

Respirators

Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. A respiratory protection program that meets OSHA's 29 CFR '1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

SECTION 9 - Physical and Chemical Properties

Physical State	: Solid
Appearance	: White Crystalline
Odor	: Odorless
pH	: 5.0 – 7.0 at 180 g/l at 25 °C (77 °F)
Vapor Pressure	: Not Available
Vapor Density	: Not Available
Viscosity	: Not Available
Freezing/Melting Point	: 168-170 °C (334-338 °F)
Boiling Point	: Not Available
Decomposition Temperature	: Not Available
Solubility	: 180g/L @ 20°C
Specific Gravity/Density	: Not Available
Molecular Formula	: C ₆ H ₁₂ O ₆
Molecular Weight	: 180.16 g/mol.

SECTION 10 - Stability and Reactivity

10.1 Chemical Stability

Stable under normal temperatures and pressures.

10.2 Conditions to Avoid

Incompatible materials, dust generation, excess heat.

10.3 Incompatibilities with Other Materials

Strong oxidizing agents.

10.4 Hazardous Decomposition Products

Carbon Monoxide, Carbon Dioxide.

10.5 Hazardous Polymerization

Will not occur.

SECTION 11 - Toxicological Information

11.1 Toxicological Effects

RTECS#	:	LW5490000
CAS#	:	59-23-4
LD50/LC50	:	Not Available
Carcinogenicity	:	59-23-4 is not listed by ACGIH, IARC, NIOSH, NTP, or OSHA

11.2 Potential Health Effects

Epidemiology	:	Not Available
Teratogenicity	:	Not Available
Reproductive Effects	:	Not Available
Neurotoxicity	:	Not Available
Mutagenicity	:	Not Available
Other Studies	:	Not Available

To the best of our knowledge the associated physical, chemical and toxicological properties of this chemical have not undergone thorough investigation, all known information is contained in this SDS.

SECTION 12 - Ecological Information

12.1 Ecotoxicity

Not Available

12.2 Persistence and Degradability

Not Available

12.3 Bioaccumulative Potential

Not Available

12.4 Mobility in Soil

Not Available

12.5 Results of PBT and vPvB Assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other Adverse Effects

Not Available

SECTION 13 - Disposal Considerations

13.1 Disposal Methods

Dispose of in a manner consistent with Federal, State, and Local Regulations.

SECTION 14 - Transport Information

Regulations	US DOT	IATA	IMDG	ADR
Shipping Name	Not Dangerous Goods	Not Dangerous Goods	Not Dangerous Goods	Not Dangerous Goods
Hazard Class				
UN Number				
Packing Group				

SECTION 15 - Regulatory Information

15.1 EHS Chemical Specific Regulations

TSCA:

CAS#	: 59-23-4 is listed on the TSCA inventory
Health & Safety Reporting List	: Not Available
Chemical Test Rules	: Not Available
Section 12b	: Not Available
Section 313	: Not Available
Clean Air Act	: Not Available
Clean Water Act	: Not Available
OSHA	: Not Available

SARA:

Section 302 (RQ)	: Not Available
Section 302 (TPQ)	: Not Available
SARA Codes	: Not Available

STATE SPECIFIC:

Pennsylvania Right To Know Components	: D-Galactose	CAS-No.59-23-4
New Jersey Right To Know Components	: D-Galactose	CAS-No.59-23-4
California Prop. 65 Components	: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.	

REACH Number	: No registration number is available, the substance or uses of this substance are exempt from registration, annual tonnage registration is not required or it is envisaged for a registration deadline at a later date.
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SECTION 16 - Additional Information

16.1 Hazard Rating

HMIS Classification

Health Hazard	0
Flammability	0
Physical Hazards	0
Personal Protection	E

NFPA Rating

Health Hazard	0
Fire	0
Reactivity Hazard	0

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