# **spectrum**<sup>®</sup>



# SAFETY DATA SHEET

Preparation Date: 10/25/2018	Revision date 10/25/2018	Revision Number: G1				
1. IDENTIFICATION						
Product identifier						
Product code:	G3123					
Product Name:	D-GLUCOSE-6-PHOSPHATE MONOSODIUM SALT					
Other means of identification						
Synonyms:	D(+)-Glucopyranose-6-phosphate, Monosodium Salt Robison Ester Monosodium Salt					
CAS #:	54010-71-8					
RTECS #	Not available					
CI#:	Not available					
Recommended use of the chem	nical and restrictions on use					
Recommended use:	No information available.					
Uses advised against	No information available					
Supplier:	Spectrum Chemical Mfg. Corp					
<b>F</b>	14422 South San Pedro St.					
	Gardena, CA 90248					
	(310) 516-8000					
Order Online At:	https://www.spectrumchemical.com					
Emergency telephone number	Chemtrec 1-800-424-9300					
Contact Person:	Tom Tyner (USA - West Coast)					
Contact Person:	Ibad Tirmiz (USA - East Coast)					
	2. HAZARDS IDENTIFICATION					

# **Classification**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### Label elements

Not classified

Hazards not otherwise classified (HNOC) Not Applicable

Other hazards Not available

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component CAS No Weight-%					
D-Glucose-6-phosphate Monosodiur		100			
	4. FIRST AID MEASURES				
First aid measures					
General Advice:	National Capital Poison Center in the Unite have a poison emergency and need to talk 1-800-222-1222.				
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops.				
Eye Contact:	Flush eyes with water for 15 minutes. Get medi persist, call a physician.	cal attention if irritation occurs. If symptoms			
Inhalation:	Move to fresh air. If breathing is difficult, give ov respiration. Get medical attention.	xygen. If not breathing, give artificial			
Ingestion:	Do not induce vomiting without medical advice. unconscious person. Consult a physician if nec				
Most important symptoms and effect	cts, both acute and delayed				
Symptoms	May cause eye/skin irritation May cause irritation of respiratory tract Health injuries are not known or expected under normal use				
Indication of any immediate medica	l attention and special treatment needed				
Notes to Physician:	Treat symptomatically.				
Protection of first-aiders First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.					
		cessary protective clothing. Dispose of			
		cessary protective clothing. Dispose of			
	as bio-hazardous waste. 5. FIRE-FIGHTING MEASURES	cessary protective clothing. Dispose of			
contaminated clothing and equipment	as bio-hazardous waste. <b>5. FIRE-FIGHTING MEASURES</b> Dry chemical. Carb foam.	oon dioxide (CO2). Water spray mist, or			
contaminated clothing and equipment and equi	as bio-hazardous waste. 5. FIRE-FIGHTING MEASURES Dry chemical. Carb foam. No information ava	oon dioxide (CO2). Water spray mist, or			
contaminated clothing and equipment and equi	as bio-hazardous waste.  5. FIRE-FIGHTING MEASURES  Dry chemical. Carb foam.  No information ava the chemical	oon dioxide (CO2). Water spray mist, or ilable. Carbon dioxide (CO2). Phosphorus			
contaminated clothing and equipment a <u>Extinguishing Media</u> Suitable Extinguishing Media: Unsuitable Extinguishing Media: <u>Specific hazards arising from</u>	<ul> <li>as bio-hazardous waste.</li> <li><b>5. FIRE-FIGHTING MEASURES</b> <ul> <li>Dry chemical. Carbon</li> <li>the chemical</li> <li>S</li> <li>Carbon monoxide. oxides. Sodium oxides.</li> </ul> </li> </ul>	oon dioxide (CO2). Water spray mist, or ilable. Carbon dioxide (CO2). Phosphorus			

MONOSODIUM SALT

# Special Protective Actions for Firefighters

**Specific Methods:** 

No information available

Special Protective Equipment for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

# Methods and material for containment and cleaning up

 Methods for containment
 Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

 Methods for cleaning up
 Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

# 7. HANDLING AND STORAGE

#### Precautions for safe handling

# **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials. All equipment used when handling the product must be grounded.

#### Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

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

# **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

# Incompatible Materials:

Strong oxidizing agents Strong acids Strong bases

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Control parameters

# National occupational exposure limits

**United States** 

Product code: G3123

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	None	None	None	None

# Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	None	None	None	None

#### Australia and Mexico

Component	CAS No	Australia	Mexico
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	None	None

# Appropriate engineering controls

#### Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

# Individual protection measures, such as personal protective equipment

# **Personal Protective Equipment**

Eye protection:	Goggles or Safety glasses with side-shields.
Skin and body protection:	Long sleeved clothing Chemical resistant apron Gloves
Respiratory protection:	Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	<b>Appearance:</b>	<b>Color:</b>
Solid	Crystalline. Crystals.	White.
<b>Odor:</b>	<b>Taste</b>	<b>Formula</b>
No information available.	No information available.	C6H12O9PNa
Molecular/Formula weight (g/mole)	: <b>Flammability (solid, gas)</b>	Flashpoint (°C/°F):
282.19	no data available	No information available
Flash Point Tested according to:	Autoignition Temperature (°C/°F):	Lower Explosion Limit (%):
Not available	No information available	No information available
Product code: G3123	Product name: D-GLUCOSE-6-PHOSPHATE	<b>Page</b> 4 / 11

MONOSODIUM SALT

**Upper Explosion Limit (%):** No information available

**Boiling point/range(°C/°F):** No information available

**Specific gravity:** No information available

**Evaporation rate:** No information available

Odor threshold (ppm): No information available

**Miscibility:** No information available **Melting point/range(°C/°F):** 204°C/399°F

Bulk density: No information available

**pH** No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

**Solubility:** No information available **Decomposition temperature(°C/°F):** No information available

**Density (g/cm3):** No information available

Vapor pressure @ 20°C (kPa): No information available

**VOC content (g/L):** No information available

Viscosity: No information available

# **10. STABILITY AND REACTIVITY**

Reactivity No information available

Chemical stability

Stability:Stable under recommended storage conditions.Possibility of Hazardous Reactions:Hazardous polymerization does not occurConditions to avoid:Heat. Ignition sources. Incompatible materials.Incompatible Materials:Strong oxidizing agents<br/>Strong acids<br/>Strong basesHazardous decomposition<br/>products:Carbon monoxide. Carbon dioxide. Phosphorus oxides. Sodium oxides.Other Information<br/>Corrosivity:No information available

# Special Remarks on Corrosivity: No information available

# **11. TOXICOLOGICAL INFORMATION**

# Information on likely routes of exposure

Principal Routes of Exposure: Ingestion. Inhalation.

Acute Toxicity

**Component Information** 

Product code: G3123

D-Glucose-6-phosphate Monosodium Salt

	Product code: G3123	Product name:	<b>Bage</b> 6/11		
	Mutagenic Effects:	No information available			
	Sensitization:	No information available.			
	Chronic Toxicity	No information available.			
Delayed and immediate effects as well as chronic effects from short and long-term exposure					
	Aspiration hazard	No information available.			
	Ingestion	May cause digestive (gastointestinal) tract irritation. Health injurior or expected under normal use.	es are not known		
	Inhalation	May cause irritation of respiratory tract.			
	Eye Contact:	May cause eye irritation.			
	Skin Contact:	May cause skin irritation.			
	<u>Symptoms</u>				
	LC50/Inhalation/mouse VALUE-Vapor = No information a VALUE - Gas = No information a VALUE - Dust/Mist = No information	vailable			
	LC50/inhalation/rat VALUE-Vapor = No information a VALUE-Gas = No information ava VALUE-Dust/Mist = No information	ailable			
	LD50/dermal/rat VALUE - Acute Tox = No informa	ation available			
	LD50/dermal/rabbit Value - Acute Toxicity = No infor	rmation available			
	LD50/oral/mouse = Value - Acute Tox = No informati	on available			
	LD50/oral/rat = Value - Acute Toxicity = No infor	rmation available			
	Product Information				
	LC50/inhalation/rat = No info LC50/inhalation/mouse = No Other LD50 or LC50informati	information available			
	LD50/dermal/rabbit = No info LD50/dermal/rat = No informa	ation available			
	LD50/oral/rat = No information LD50/oral/mouse = No inform	nation available			
	D-Glucose-6-phosphate Monosodium CAS No	54010-71-8			
	ID-CILLCOSE-6-DROSDRATE MIDROSOGIUM	Salt			

# Carcinogenic effects:

Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
ACGIH (American Conference of Governmental Industrial Hygienists) IARC (International Agency for Research on Cancer)							
NTP (National Toxicology Program)							
OSHA (Occupational Safety and Health Administration of the US Department of Labor)							

Reproductive toxicity	No data is available
Reproductive Effects:	No information available
Developmental Effects:	No information available
Teratogenic Effects:	No information available

Specific Target Organ Toxicity

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organs:	No information available.

# **12. ECOLOGICAL INFORMATION**

**Ecotoxicity** 

Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available.
Mobility in soil Other adverse effects	No information available No information available.

# **13. DISPOSAL CONSIDERATIONS**

# **Disposal Methods**

# Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

# Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	None	None	None	None

Product code: G3123

#### DOT

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide	No information available
Number	
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available

Not regulated

Not regulated

Not regulated

Not regulated

Not regulated

No information available

No information available No information available

No information available

No information available

No information available

No information available

No information available

No information available

No information available

No information available

No information available

No information available

No information available

No information available No information available

#### TDG (Canada)

UN-No: Proper Shipping Name: Hazard Class Subsidiary Risk: Packing Group: Marine Pollutant Description:

#### ADR

UN Number Proper Shipping Name: Transport hazard class(es) Packing group Subsidiary Risk:

#### IMDG

UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant

# RID

UN Number Proper Shipping Name: Transport hazard class(es) Subsidiary Risk: Packing group

#### ICAO (air)

UN-No: Proper Shipping Name: Hazard Class Subsidiary Risk: Packing Group:

# ΙΑΤΑ

Product code: G3123

UN Number	Not regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Subsidiary Risk:	No information available
Packing group	No information available
Precautionary Statements -	No information available
Response	
Special Provisions	No information available

# **15. REGULATORY INFORMATION**

# **International Inventories**

Component CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
D-Glucose-6-phosphat 54010-71-8	Not Listed	Present KE-17736	Not present	Not present	Present	Not listed	Present
e Monosodium Salt		NE-17730					258-921-0

# **U.S. Regulations**

#### California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

#### Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

#### Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity		Female
				Reproductive	Reproductive
				Toxicity	Toxicity:
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	Not Listed	Not Listed	Not Listed	Not Listed

#### CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
D-Glucose-6-phosp hate Monosodium Salt	54010-71-8	None	None	None	None	None

#### U.S. TSCA

Component		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	Not Applicable	Not Applicable

#### Canada

#### WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Not a dangerous product according to HPR classification criteria.

Product code: G3123

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

#### DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
D-Glucose-6-phosphate	54010-71-8	Not Listed	Not Listed
Monosodium Salt			

Component	CAS No	CEPA Schedule I - Toxic Substances
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject
		to Mandatory Reporting
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	Not listed

#### EU Classification

#### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	

#### EU - CLP (1272/2008)

#### R-phrase(s)

not determined (not applicable)

#### S -phrase(s)

#### none

Component	CAS No	 Concentration Limits:	Safety Phrases
D-Glucose-6-phosphate Monosodium Salt	54010-71-8	No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

# Indication of danger:

Not dangerous

# **16. OTHER INFORMATION**

Preparation Date:	10/25/2018
Revision date	10/25/2018
Prepared by:	Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications.

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#### End of Safety Data Sheet