SAFETY DATA SHEET

Preparation Date: 8/29/2016  Revision Date: 6/1/2017  Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: G1296
Product Name: Glucosamine Sulfate Potassium Chloride, USP

Other means of identification

Synonyms: Bis (D-glucose, 2-amino-2-deoxy-), sulfate potassium chloride complexes; Bis(2-amino-2-deoxy-beta-D-glucopyranose) sulfate potassium chloride complexes; D-Glucose, 2-amino-2-deoxy-, sulfate, compd. with potassium chloride (KCl) (1:-??:?)

CAS #: 1296149-08-0
RTECS #: Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against: No information available

Supplier:
Spectrum Chemical Mfg. Corp
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: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (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 Hazardous

Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available
3. COMPOSITION/INFORMATION ON INGREDIENTS

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<th>Components</th>
<th>CAS-No.</th>
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<td>1296149-08-0</td>
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4. FIRST AID MEASURES

First aid measures

**General Advice:**
National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 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. Consult a physician if necessary.

**Eye Contact:**
Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

**Inhalation:**
Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:**
Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
Health injuries are not known or expected under normal use. May cause gastrointestinal upset or indigestion. May cause epigastric pain. May cause abdominal pain, nausea, vomiting, diarrhea. May cause dyspepsia. May cause heartburn. May cause constipation. May cause headache. Drowsiness.

**Indication of any immediate medical 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.

5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media:**
Not applicable.

**Unsuitable Extinguishing Media:**
No information available.

**Specific hazards arising from the chemical**

**Hazardous Combustion Products:**

**Specific hazards:**
No information available.

**Special Protective Actions for Firefighters**

Product code: G1296
Product name: Glucosamine Sulfate Potassium Chloride, USP
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: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition. Avoid breathing dust.

Environmental precautions: Prevent further leakage or spillage. Prevent product from entering drains.

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

Technical Measures/Precautions: Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

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

Incompatible Materials: Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

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Canada

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Product code: G1296  
Product name: Glucosamine Sulfate Potassium Chloride, USP
Columbia

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**Glucosamine Sulfate**

**Potassium Chloride**

**Appropriate engineering controls**

**Engineering measures to reduce exposure:** Ensure adequate ventilation, especially in confined areas. 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:** Chemical resistant apron, Gloves, Long sleeved clothing
- **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. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- **Physical state:** Solid
- **Appearance:** Crystalline powder
- **Color:** White
- **Odor:** No information available
- **Taste:** No information available
- **Flammability:** No information available
- **Molecular/Formula weight:** 605.52 g/mol
- **Flammable:** No information available
- **Flash Point Tested according to:** Not available
- **Autoignition Temperature (°C/°F):** No information available
- **Lower Explosion Limit (%):** No information available
- **Upper Explosion Limit (%):** No information available
- **Melting point/range(°C/°F):** No information available
- **Decomposition temperature(°C/°F):** No information available
- **Boiling point/range(°C/°F):** No information available
- **Bulk density:** No information available
- **Density (g/cm³):** No information available

**Product code:** G1296

**Product name:** Glucosamine Sulfate Potassium Chloride, USP
10. STABILITY AND REACTIVITY

Reactivity
Reactive with oxidizing agents

Chemical stability
Stability: Stable under recommended storage conditions.
Possibility of Hazardous Reactions: Hazardous polymerization does not occur
Incompatible Materials: Strong oxidizing agents

Other Information
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

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Other LD50 or LC50 information = No information available

Product code: G1296
Product name: Glucosamine Sulfate Potassium Chloride, USP
Product Information

LD50/oral/rat = VALUE - Acute Tox Oral = No information available

LD50/oral/mouse = Value - Acute Tox Oral = No information available

LD50/dermal/rabbit VALUE - Acute Tox Dermal = No information available

LD50/dermal/rat VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation May cause respiratory tract irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Causes abdominal pain (epigastric distress). May cause dyspepsia. May cause constipation. May cause heartburn. May cause anorexia. May affect behavior/central nervous system (headache, drowsiness).

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

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ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)
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:
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

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14. TRANSPORT INFORMATION

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 Number
No information available
Marine Pollutant
No data available
DOT RQ (lbs):
No information available

Product code: G1296
Product name: Glucosamine Sulfate Potassium Chloride, USP
15. REGULATORY INFORMATION

International Inventories

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Product name: Glucosamine Sulfate Potassium Chloride, USP
Components

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CERCLA/SARA

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U.S. TSCA

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<th>TSCA 8(d) - Health and Safety Reporting</th>
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Canada

WHIMIS 2015 - GHS Classifications

WHIMIS 2015 Hazard Classification Information: Not a dangerous product according to HPR classification criteria.

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.

WHIMIS 1988 Hazard Class

Non-controlled

Canada Controlled Products Regulation: This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

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Product code: G1296

Product name: Glucosamine Sulfate Potassium Chloride, USP
Glucosamine Sulfate Potassium Chloride 1296149-08-0 Not listed

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<td>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</td>
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Glucosamine Sulfate Potassium Chloride 1296149-08-0 Not listed

EU Classification

EU GHS - SV - CLP 172/2008

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EU - CLP (1272/2008)

R-phrase(s)

not determined (not applicable)

S-phrase(s)

none

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

Indication of danger:

None.

16. OTHER INFORMATION

Preparation Date: 8/29/2016
Revision Date: 6/1/2017
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. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user’s responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet

Product code: G1296  
Product name: Glucosamine Sulfate Potassium Chloride, USP