

SAFETY DATA SHEET

Preparation Date: 4/29/2016

Revision Date: 7/26/2016

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: P3033
Product Name: PHOSPHATE BUFFERED SALINE SOLUTION, 1X, STERILE, BIOTECHGRADE

Other means of identification

Synonyms: No information available
CAS #: Mixture
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 classified

Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Water	7732-18-5	97
Sodium Phosphate, Dibasic	7558-79-4	1
Sodium Chloride	7647-14-5	1
Potassium Chloride	7447-40-7	1

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.
- 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 May cause eye/skin irritation. May cause digestive (gastrointestinal) tract irritation.

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: The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: No information available.

Specific hazards: No information available.

Special Protective Actions for Firefighters

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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: Use personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. 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. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe vapors or spray mist. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Water	7732-18-5	None	None	None	None
Sodium Phosphate, Dibasic	7558-79-4	None	None	None	None
Sodium Chloride	7647-14-5	None	None	None	None
Potassium Chloride	7447-40-7	None	None	None	None

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Canada

Components	CAS-No.	Alberta	British Columbia	Ontario	Quebec
Water	7732-18-5	None	None	None	None
Sodium Phosphate, Dibasic	7558-79-4	None	None	None	None
Sodium Chloride	7647-14-5	None	None	None	None
Potassium Chloride	7447-40-7	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Water	7732-18-5	None	None
Sodium Phosphate, Dibasic	7558-79-4	None	None
Sodium Chloride	7647-14-5	None	None
Potassium Chloride	7447-40-7	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

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. Long sleeved clothing. Gloves.

Respiratory protection:

Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, 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, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Liquid

Appearance:

No information available.

Color:

Colorless.

Odor:

No information available.

Taste

No information available.

Formula:

No information available

Molecular/Formula weight:

No information available

Flammability:

No information available

Flashpoint (°C/°F):

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

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Boiling point/range(°C/°F):

No information available

Bulk density:

No information available

Density (g/cm3):

No information available

Specific gravity:

No information available

pH:

No information available

Vapor pressure @ 20°C (kPa):

No information available

Evaporation rate:

No information available

Vapor density:

No information available

VOC content (g/L):

No information available

Odor threshold (ppm):

No information available

Partition coefficient**(n-octanol/water):**

No information available

Viscosity:

No information available

Miscibility:

No information available

Solubility:

Freely soluble in water

10. STABILITY AND REACTIVITY**Reactivity**

May react with strong oxidizers

Chemical stability**Stability:**

Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur**Conditions to avoid:**

Incompatible materials.

Incompatible Materials:

Strong oxidizing agents.

Hazardous decomposition products:No information available.**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:**

Skin. Ingestion. Eyes.

Acute Toxicity**Component Information**

Water - 7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat**LD50/oral/mouse =** No information available**LD50/dermal/rabbit =** No information available**LD50/dermal/rat =** No information available**LC50/inhalation/rat =** No information available**Product code:** P3033**Product name:** PHOSPHATE
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LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Sodium Phosphate, Dibasic - 7558-79-4

LD50/oral/rat = 17000 mg/kg oral LD50 rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = >7940 mg/kg dermal LD50 rabbit
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Sodium Chloride - 7647-14-5

LD50/oral/rat = 3 g/kg Oral LD50 Rat
LD50/oral/mouse = 4 g/kg
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = 42 g/m³ Inhalation LC50 Rat 1 h
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Potassium Chloride - 7447-40-7

LD50/oral/rat = 2600 mg/kg Oral LD50 Rat
LD50/oral/mouse = 1500 mg/kg Oral LD50 Mouse
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

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.

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Inhalation May cause irritation of respiratory tract.

Ingestion May cause digestive (gastrointestinal) tract irritation.

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.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Sodium Phosphate, Dibasic	7558-79-4	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Sodium Chloride	7647-14-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Potassium Chloride	7447-40-7	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: Aquatic environment.

Sodium Phosphate, Dibasic - 7558-79-4

Freshwater Fish Species Data: >=100 mg/L LC50 fish

Water Flea Data: 3580 mg/l LC50 48 hr

Sodium Chloride - 7647-14-5

Freshwater Fish Species Data: 4747 - 7824 mg/L LC50 Oncorhynchus mykiss 96 h flow-through 1

5560 - 6080 mg/L LC50 Lepomis macrochirus 96 h flow-through 1

6020 - 7070 mg/L LC50 Pimephales promelas 96 h static 1

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Water Flea Data: 6420 - 6700 mg/L LC50 Pimephales promelas 96 h static 1
 12946 mg/L LC50 Lepomis macrochirus 96 h static 1
 7050 mg/L LC50 Pimephales promelas 96 h semi-static 1
 340.7 - 469.2 mg/L EC50 Daphnia magna 48 h
 1000 mg/L EC50 Daphnia magna 48 h
Potassium Chloride - 7447-40-7
Freshwater Algae Data: 2500 mg/L EC50 Desmodesmus subspicatus 72 h
Freshwater Fish Species Data: 750 - 1020 mg/L LC50 Pimephales promelas 96 h static 1
 1060 mg/L LC50 Lepomis macrochirus 96 h static 1
Water Flea Data: 825 mg/L EC50 Daphnia magna 48 h
 83 mg/L EC50 Daphnia magna 48 h
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

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Water	7732-18-5	None	None	None	None
Sodium Phosphate, Dibasic	7558-79-4	None	None	None	None
Sodium Chloride	7647-14-5	None	None	None	None
Potassium Chloride	7447-40-7	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: None
ERG No: No information available
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions No Information available
Symbol(s): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No Information available

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ADR

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No information available

RID

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
ERG Code: No information available
Special Provisions No information available

15. REGULATORY INFORMATION**International Inventories**

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Water</i>	7732-18-5	Present	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
<i>Sodium Phosphate, Dibasic</i>	7558-79-4	Present	Present KE-12344	Present	Present (1)-497	Present	Present	Present 231-448-7
<i>Sodium Chloride</i>	7647-14-5	Present	Present KE-31387	Present	Present (1)-236	Present	Present	Present 231-598-3
<i>Potassium Chloride</i>	7447-40-7	Present	Present KE-29086	Present	Present (1)-228	Present	Present	Present 231-211-8

U.S. Regulations

Sodium Phosphate, Dibasic

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 1723

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New Jersey - Discharge Prevention - List of Hazardous Substances: Present

Pennsylvania RTK: Environmental hazard

Pennsylvania RTK - Environmental Hazard List Present

New York Release Reporting - List of Hazardous Substances:

5000 lb RQ

100 lb RQ

Louisiana Reportable Quantity List for Pollutants: 5000lbfinal RQ

2270kgfinal RQ

California Directors List of Hazardous Substances: Present

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 182.1778 21 CFR 182.6778 21 CFR 182.8778

FDA - Direct Food Additives 21 CFR 173.310

FDA - 21 CFR - Total Food Additives 133.169 133.173 133.179 135.110 137.305 139.110 150.141 150.161 173.310
175.210 175.300 181.29 182.1778 182.6290 182.6778 182.8778 73.85

Sodium Chloride

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 182.70 21 CFR 182.90

FDA - 21 CFR - Total Food Additives 100.155 101.22 101.61 131.111 131.112 131.160 131.162 131.170 133.106 133.113
133.121 133.123 133.124 133.127 133.129 133.133 133.136 133.138 133.141
133.147 133.150 133.153 133.155 133.156 133.162 133.165 133.169 133.173
133.179 133.181 133.182 133.183 133.184 133.186 133.187 133.188 133.189
133.190 133.195 136.110 137.180 139.110 139.150 145.110 145.130 150.110
155.120 155.130 155.190 155.191 155.194 155.200 155.201 155.3 156.145 156.3
158.170 161.130 161.145 161.170 161.173 161.190 163.111 163.112 163.113
163.123 163.130 166.110 168.130 168.140 168.160 168.180 169.115 169.140
169.150 172.177 172.430 172.490 172.840 172.861 182.1 182.70 182.90

Potassium Chloride

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 184.1622

FDA - 21 CFR - Total Food Additives 150.141 150.161 166.110 184.1622 201.306

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)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Sodium Phosphate, Dibasic	7558-79-4	Not Listed	Not Listed	Not Listed	Not Listed
Sodium Chloride	7647-14-5	Not Listed	Not Listed	Not Listed	Not Listed
Potassium Chloride	7447-40-7	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	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
Water	7732-18-5	None	None	None	None	None
Sodium Phosphate, Dibasic	7558-79-4	5000 lb final RQ 2270 kg final RQ	None	None	None	None
Sodium Chloride	7647-14-5	None	None	None	None	None
Potassium Chloride	7447-40-7	None	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Water	7732-18-5	Not Applicable	Not Applicable
Sodium Phosphate, Dibasic	7558-79-4	Not Applicable	Not Applicable
Sodium Chloride	7647-14-5	Not Applicable	Not Applicable

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Potassium Chloride	7447-40-7	Not Applicable	Not Applicable
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Canada

WHMIS hazard class:

Non-controlled

Components

Water

Sodium Chloride

Potassium Chloride

WHIMHAZ

Uncontrolled product according to WHMIS classification criteria

Uncontrolled product according to WHMIS classification criteria

Uncontrolled product according to WHMIS classification criteria including 23.8%

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

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Sodium Phosphate, Dibasic	7558-79-4	Present	Not Listed
Sodium Chloride	7647-14-5	Present	Not Listed
Potassium Chloride	7447-40-7	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Water	7732-18-5	Not listed
Sodium Phosphate, Dibasic	7558-79-4	Not listed
Sodium Chloride	7647-14-5	Not listed
Potassium Chloride	7447-40-7	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Water	7732-18-5	Not listed
Sodium Phosphate, Dibasic	7558-79-4	Not listed
Sodium Chloride	7647-14-5	Not listed
Potassium Chloride	7447-40-7	Not listed

EU Classification

R-phrase(s)

none

S -phrase(s)

none

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Water	7732-18-5		No information	
Sodium Phosphate, Dibasic	7558-79-4		No information	
Sodium Chloride	7647-14-5		No information	
Potassium Chloride	7447-40-7		No information	

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

Indication of danger:

None.

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16. OTHER INFORMATION

Preparation Date: 4/29/2016
Revision Date: 7/26/2016
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