

Safety Data Sheet

Phosphate Buffer, pH 6.0

Section 1 - Chemical Product and Company Identification

SDS Name: Phosphate Buffer, pH 6.0

Catalog Numbers: SO-916, E-340-2

Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923

For information, call: 978-739-4883

Emergency Number: 800-424-9300

For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

Based on available data, the GHS classification criteria are not met.

Pictograms or Hazard symbols and Hazard statement(s):

No GHS Hazard Symbols.

Hazard Statements:

No GHS Hazard Statements.

Precautionary Statements:

No GHS Precautionary Statements.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7647-14-5	Sodium Chloride	0.8 w/v
10049-21-5	Sodium Phosphate Monobasic Monohydrate	0.2 w/v
7558-79-4	Sodium Phosphate Dibasic Anhydrous	0.04 w/v
89-83-8	Thymol	<0.01 w/v
7732-18-5	Water	Balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical attention.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Get medical attention if symptoms occur.

Oral Exposure: If swallowed, rinse mouth with water. After rinsing with water, drink small amounts of water (stop if the exposed person feels sick as vomiting may be dangerous). Get medical attention.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Phosphorous oxides, sodium oxides, hydrogen chloride gas, irritating fumes and gases.

Flash Point: Not available

Autoignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Store in a tightly closed container in a cool, dry, and well-ventilated place. Keep away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

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.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: 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.

Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Sodium Chloride CAS#7647-14-5	Not listed	Not listed	Not listed
Sodium Phosphate Monobasic Monohydrate CAS#10049-21-5	Not listed	Not listed	Not listed
Sodium Phosphate Dibasic Anhydrous CAS#7558-79-4	Not listed	Not listed	Not listed

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear, colorless

Odor: Odorless

Vapor Pressure: Not available

Odor Threshold: Not available

Vapor Density: Not available

pH: 5.9-6.1

Relative Density: Not available

Melting point/freezing point: Not available

Solubility: Soluble in water

Boiling Point: Not available
Flash Point: Not available
Evaporation Rate: Not available
Flammability (solid, gas): Not applicable
Partition coefficient: n-octanol/water: Not available
Autoignition Temperature: Not available
Decomposition Temperature: Not available
Viscosity: Not available
Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials and excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, strong bases, and metals.
Hazardous Decomposition Products: Phosphorous oxides, sodium oxides, hydrogen chloride gas, irritating fumes and gases.

Section 11 - Toxicological Information

CAS#7647-14-5 Sodium Chloride: RTECS#: VZ4725000

LD50 Oral: 3 g/kg (rat)
LD50 Dermal: >10000 mg/kg (rat)
LC50 Inhalation: >42 mg/L 1h (rat)

Carcinogenicity: Sodium Chloride CAS#7647-14-5 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#10049-21-5 Sodium Phosphate Monobasic Monohydrate:

LD50 Oral: 8290 mg/kg (rat)
LD50 Dermal: >7940 mg/kg (rabbit)
LC50 Inhalation: >0.83 mg/L 4h (rat)

Carcinogenicity: Sodium Phosphate Monobasic Monohydrate CAS#10049-21-5 is not listed by IARC, NTP, ACGIH, or California Prop. 65.

CAS#7558-79-4 Sodium Phosphate Dibasic Anhydrous: RTECS#: WC4500000

LD50 Oral: >2000 mg/kg (rat)
LD50 Dermal: >2000mg/kg (rat)
LC50 Inhalation: >0.83 mg/L 4h (rat)

Carcinogenicity: Sodium Phosphate Dibasic Anhydrous CAS#7558-79-4 is not listed by IARC, NTP, ACGIH, or California Prop. 65.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available.

Teratogenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects: Not available

Neurotoxicity: Not available.

Mutagenicity: Not available.

Specific Target Organ Toxicity, Single Exposure: Not available.

Specific Target Organ Toxicity, Repeated Exposure: Not available.

Symptoms associated with exposure: Overexposure may cause nausea, vomiting, diarrhea, dehydration. Inflammatory reactions in the gastrointestinal tract.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains.

CAS#7647-14-5 Sodium Chloride:

LC50, freshwater fish: 7650 mg/L 96h (pimephales promelas)

LC50, water flea: 4136 mg/L 48h static (daphnia magna)

EC50, algae: 2430 mg/L 120h static (nitzschia sp.)

CAS#7558-79-4 Sodium Phosphate Dibasic Anhydrous:

LC50, freshwater fish: >100 mg/L 96h semi-static (oncorhynchus mykiss)(rainbow trout)

EC50, water flea: >100 mg/L 48h static (daphnia magna)

EC50, bacteria: >1000 mg/L 3h static (activated sludge)

EC50, algae: >100 mg/L 72h static (desmodesmus subspicatus)(green algae)

Persistence and degradability: Not available.

Bio-accumulative potential: Not available.

Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 - Transport Information

DOT

Non-Regulated

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 10-15-12

Revision #1: 4-14-14 YM

Revision #2: 6-9-15

Revision #3: 9-20-19

Revision #4: 2-8-23

Revision #5: 1-5-26

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