

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: Phosphate Buffer
Cat. No: SP 130

Molecular Research Center, Inc.
5645 Montgomery Rd.
Cincinnati, Ohio 45212
USA 1-888-841-0900

Product Name: Phosphate Buffer
Synonym: Dibasic sodium phosphate, disodium hydrogen phosphate, phosphoric acid, disodium salt.
Chemical Formula: Na_2HPO_4

NFPA RATINGS: (scale 0-4) Health=1 Fire=0 Reactivity=0
HMIS RATINGS: (scale 0-4) Health=1 Fire=0 Reactivity=0 PPE=C

CHEMTREC EMERGENCY NUMBER: Only in the event of an emergency involving a spill, leak, fire exposure or accident. USA: 1-800-424-9300; International: 1-703-527-3887

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Component	CAS No	Percent
Sodium Phosphate 0.3M	7558-79-4	<5%
Nonhazardous Components	NA 0004	>95%

3. HEALTH HAZARD IDENTIFICATION

Skin: May cause irritation and redness.

Eye: May cause irritation and redness.

Ingestion: Phosphates are slowly and incompletely absorbed and seldom cause systemic effects. Toxicity of phosphates may be due to their ability to sequester calcium.

Inhalation: Material may irritate mucous membranes and upper respiratory tract.

4. FIRST AID

In case of contact, immediately flush eyes or skin with water for at least 15 min. In case of contact, wash skin with soap and copious amounts of water. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, wash out mouth with water provided person is conscious. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Seek medical attention as required. Wash contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Emits toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Wear chemical resistant gloves, safety goggles, other protective clothing. Avoid contact with eyes, skin. Adsorb with sand or vermiculite and place in containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Keep container tightly closed. Store in a cool dry place. Irritant. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes and clothing. Additional safety equipment should include safety shower and eye bath. Wash thoroughly after handling.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ROUTINE OPERATION: Use good laboratory practice when working with this substance. Wear lab coat, safety glasses, and gloves to provide minimal protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid
Odor: Odorless
pH: 8.4-8.6

10. STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage.

INCOMPATIBILITIES: Strong acids.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Nature of decomposition products is not known.

11. TOXICOLOGICAL INFORMATION

May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation. Material is irritating to mucous membranes and upper respiratory tract. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA: Rat: oral LD50=17 gm/kg. **Rabbit:** (irritation data) skin 500mg/24 hr is mild; eye 500mg/24 hr is mild

RTECS # WC4500000. See actual entry in RTECS for complete information. Data refers to pure sodium phosphate.

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATIONS

For small quantities, carefully add to large excess of water. Flush the aqueous solution down the drain with plenty of water. Observe all federal, state and local environmental regulations.

14. TRANSPORTATION INFORMATION

Not available.

15. REGULATORY INFORMATION

OSHA TWA; 1 mg/m³ OSHA STEL; 3 mg/m³ ACGIH TWA; 1 mg/m³; 5000 lbs CERCLA 103 Reportable Quantity; Subject to SARA Section 313 Annual Toxic Chemical Release Reporting.

16. OTHER INFORMATION

Reviewed by	BW, MJ
Creation date	12/04/96
Revision date	2/01/09

This information is believed to be accurate and represents the information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

Abbreviations:

N/A	Not Applicable
N.D.A	No data available
TLV-STEL	Threshold Limit Values (Short-Term Exposure Limit)
TLV-TWA	Threshold Limit Values (Time-Weighted Average)
OSHA PEL-TWA	OSHA Permissible Exposure Level