

# MATERIAL SAFETY DATA SHEET

MSDS DATE:10/20/2007

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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: SORENSEN'S PHOSPHATE BUFFER  
SYNONYMS: N/A  
PRODUCT CODES: 11600-05  
MANUFACTURER: ELECTRON MICROSCOPY SCIENCES  
DIVISION: 1560 INDUSTRY ROAD/P.O. BOX 550  
ADDRESS: HATFIELD, PA 19440

EMERGENCY PHONE: 215-412-8400  
CHEMTREC PHONE: 800-424 9300

FAX PHONE: 215-412-8450

CHEMICAL NAME: N/A  
CHEMICAL FAMILY: NA

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## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

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<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>%WT</u>
SODIUM PHOSPHATE MONOBASIC	10049-21-5	3-4%
SODIUM PHOSPHATE DIBASIC	7782-85-6	3-4%
WATER	7732-18-5	BALANCE

### SODIUM PHOSPHATE MONOBASIC

OSHA-PEL-TWA 1mg/m<sup>3</sup>  
OSHA-PEL-STEL 3mg/m<sup>3</sup>  
ACGIH-PEL-TWA 1mg/m<sup>3</sup>

### SODIUM PHOSPHATE DIBASIC

OSHA-PEL-TWA 1mg/m<sup>3</sup>  
OSHA-PEL-STEL 3mg/m<sup>3</sup>  
ACGIH-PEL-TWA 1mg/m<sup>3</sup>

### WATER

N/A

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## SECTION 3: HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW: N/A

ROUTES OF ENTRY: INHALATION, EYES, SKIN, INGESTION

### POTENTIAL HEALTH EFFECTS

EYES: MAY CAUSE IRRITATION AND REDNESS

SKIN: 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 MEMBRANCES AND UPPER RESPIRATORY TRACT.

ACUTE HEALTH HAZARDS: N/A

CHRONIC HEALTH HAZARDS: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

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## CARCINOGENICITY

OSHA: N/A      ACGIH: N/A      NTP: N/A      IARC: N/A  
OTHER:

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## SECTION 4: FIRST AID MEASURES

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**EYES:** FLUSH WITH WATER FOR 15 MINUTES IF IRRITATION OCCURS. SEEK MEDICAL ATTENTION

**SKIN:** WASH WITH SOAP AND WATER. IF IRRITATION OCCURS. SEEK MEDICAL ATTENTION.

**INGESTION:** WASH OUT WITH WATER PROVIDED PERSON IS CONSCIOUS. SEEK MEDICAL ATTENTION AS REQUIRED.

**INHALATION:** REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** N/A

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## SECTION 5: FIRE-FIGHTING MEASURES

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**FLAMMABLE LIMITS IN AIR, UPPER:** N/A  
(% BY VOLUME)      **LOWER:**

**FLASH POINT:** N/A

F:

C:

**METHOD USED:**

**AUTOIGNITION TEMPERATURE:** N/A

F:

C:

### NFPA HAZARD CLASSIFICATION

**HEALTH:** 1      **FLAMMABILITY:** 0      **REACTIVITY:** 0  
**OTHER:**

### HMIS HAZARD CLASSIFICATION

**HEALTH:** 1      **FLAMMABILITY:** 0      **REACTIVITY:** 0  
**PROTECTION:** C

**EXTINGUISHING MEDIA:** NON COMBUSTIBLE. WEAR SELF CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

**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.

**HAZARDOUS DECOMPOSITION PRODUCTS:** N/A

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**ACCIDENTAL RELEASE MEASURES:** WEAR CHEMICAL RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING. AVOID CONTACT WITH EYES, SKIN. ABSORB WITH SAND OR VERMICULITE AND PLACE IN CONTAINERS FOR DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL IS COMPLETE.

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## SECTION 7: HANDLING AND STORAGE

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HANDLING AND STORAGE: KEEP CONTAINER TIGHTLY CLOSED, STORE IN A COOL DRY PLACE, IRRITANT.

OTHER PRECAUTIONS: ADDITIONAL SAFETY EQUIPMENT SHOULD INCLUDE SAFETY SHOWER/EYE BATH. WASH THOROUGHLY AFTER HANDLING.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING CONTROLS: N/A

VENTILATION: WELL VENTILATED AREA

RESPIRATORY PROTECTION: N/A

EYE PROTECTION: SAFETY GLASSES

SKIN PROTECTION: WEAR LAB COAT AND GLOVES

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: USE GOOD LABORATORY PRACTICE WHEN WORKING WITH THIS SUBSTANCE.

WORK HYGIENIC PRACTICES: WASH THOROUGHLY AFTER HANDLING. WASH CLOTHING BEFORE REUSE.

EXPOSURE GUIDELINES: N/A

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE: TRANSPARENT, NO COLOR

ODOR: ODORLESS

PHYSICAL STATE: LIQUID

pH AS SUPPLIED: 7.4

pH (Other):

BOILING POINT: (LIKE) WATER

F:

C:

MELTING POINT: (LIKE) WATER

F:

C:

FREEZING POINT: N/A

F:

C:

VAPOR PRESSURE (mmHg): N/A

@

F:

C:

VAPOR DENSITY (AIR = 1): N/A

@

F:

C:

@

F:

C:

EVAPORATION RATE: N/A

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BASIS (=1):

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

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SOLUBILITY IN WATER: (LIKE) WATER

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N/A  
BY WT/ BY VOL @

F:

C:

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER: LBS/GAL  
WITHOUT WATER: LBS/GAL

DENSITY g/cm<sup>3</sup>: 1.0079

VISCOSITY: n/a

@

F:

C:

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## SECTION 10: STABILITY AND REACTIVITY

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STABILITY: STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE

CONDITIONS TO AVOID (STABILITY): STRONG ACIDS

INCOMPATIBILITY (MATERIAL TO AVOID): ACIDS

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: NATURE OF DECOMPOSITION PRODUCTS IS NOT KNOWN.

HAZARDOUS POLYMERIZATION: N/A

CONDITIONS TO AVOID (POLYMERIZATION): N/A

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## SECTION 11: TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION: THE THE BES OF KNOWLEDGE, THE CHEMICAL, PHYSICAL AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.  
RTECS# WC450000. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

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## SECTION 12: ECOLOGICAL INFORMATION

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ECOLOGICAL INFORMATION: N/A

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## SECTION 13: DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD: COMPLY WITH FEDERAL, STATE, LOCAL REGULATIONS.

RCRA HAZARD CLASS: N/A

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SECTION 13: DISPOSAL CONSIDERATIONS (con't)

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## SECTION 14: TRANSPORT INFORMATION

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### U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: NOT A REGULATED MATERIAL  
HAZARD CLASS:  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENT:

### WATER TRANSPORTATION

PROPER SHIPPING NAME:  
HAZARD CLASS: SAME  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENTS:

### AIR TRANSPORTATION

PROPER SHIPPING NAME:  
HAZARD CLASS: SAME  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENTS:

OTHER AGENCIES: N/A

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## SECTION 15: REGULATORY INFORMATION

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### U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): N/A

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): 103

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): SUBJECT TO SARA SECTION 313 ANNUAL TOXIC CHEMICAL RELEASE REPORTING.

311/312 HAZARD CATEGORIES: N/A

313 REPORTABLE INGREDIENTS: N/A

STATE REGULATIONS: N/A

INTERNATIONAL REGULATIONS: N/A

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## SECTION 16: OTHER INFORMATION

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OTHER INFORMATION:

PREPARATION INFORMATION:

DISCLAIMER: IN COMPLIANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD, 29 C.F.R 1910. 1200, WE ARE PROVIDING YOU WITH A MSDS FOR THE HAZARDOUS MATERIAL YOU ARE PURCHASING.

IT IS YOUR RESPONSIBILITY TO EDUCATE YOUR EMPLOYEES ON THE SAFE USE OF THE HAZARDOUS MATERIAL.

ELECTRON MICROSCOPY SCIENCES MAKES NO PRESENTATION AS TO THE ACCURACY OF THE INFORMATION IN THE MSDS. THE INFORMATION IS BELIEVED TO BE CORRECT; HOWEVER, YOU (THE CUSTOMER), SHOULD PERFORM YOUR OWN INVESTIGATION AND INDEPENDENT VERIFICATION. IF YOU RESELL THE PRODUCT, YOU ARE RESPONSIBLE TO FORWARD THE

# **MATERIAL SAFETY DATA SHEET**

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**INFORMATION IN THE MSDS TO YOUR CUSTOMER.**