

BOON STREAM CHEM INTERNATIONAL TRADE

CO.,LIMITED

Material Safety Data Sheet

TRISODIUM PHOSPHATE (TSP)

Section 1 - Product and Company Identification

Product Name: TRISODIUM PHOSPHATE

Trade Names: N/A

Synonyms: TSP, Phosphoric Acid, Trisodium Salt Dodecahydrate

MSDS Creation Date: December 2007

MSDS Current revision date: None

Manufacture by: CHENGDU BOON STREAM CHEMICAL INDUSTRY CO., LTD

EMERGENCY: CHEMTREC (24 Hour Emergency Response) 0086-28-83156758

Section 2 – Composition / Information on Ingredients

Ingredient Name CAS Number

TRISODIUM PHOSPHATE

10101-89-0

Section 3 - Hazards Identification

Emergency overview: Product is not considered hazardous by known governmental definitions.

EMERGENCY OVERVIEW Appearance and Odor: White, crystalline, free-flowing granules or powder with no odor WARNING STATEMENTS DANGER! CAUSES EYE BURNS MAY CAUSE SKIN IRRITATION POTENTIAL HEALTH EFFECTS Likely Routes of Exposure: Skin contact and inhalation

EYE CONTACT: This product causes eye burns based on toxicity studies. Injury may be permanent. SKIN CONTACT: This product may cause pain, redness, swelling, and

blisters. No more than slightly toxic based on toxicity studies. INHALATION: Inhalation of heavy dust may severely irritate nose and throat. INGESTION: No more than slightly toxic if swallowed based on toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed. Refer to Section 11 for toxicological information.

Section 4 - First aid Measures

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. If easy to do, remove any contact lenses. Get medical attention. Remove material from eyes, skin and clothing. IF ON SKIN, immediately flush the area with plenty of water. Remove contaminated clothing. Get medical attention if irritation persists. Wash clothing and thoroughly clean shoes before reuse. IF INHALED, immediate first aid is not likely to be required. However, if symptoms occur, remove to fresh air. IF SWALLOWED, Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention. A Poison Control Center can be contacted for advice.

Section 5 - Fire-Fighting Measures

Flash Point: None

Auto Ignition Temperature: Not Determined

Fire and Explosion Hazard: Product is not combustible / None.

Extinguishing Media: Any as determined by fire fighting agency

Firefighting: No special fire fighting procedures.

Section 6 - Accidental Release Measures

In case of spill, sweep, scoop or vacuum and remove. Flush residual spill area with water. Refer to Section 13 for disposal information and Sections 14 and 15 for reportable quantity information.

Section 7 - Handling and Storage

HANDLING Do not get in eyes, on skin, or on clothing. Avoid breathing dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Emptied container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. STORAGE: Store in a cool, dry place to maintain product performance. Sealed containers should be kept free of water because of its corrosivity when wet.

Section 8 – Exposure Controls / Personal Protection

EYE PROTECTION: Where there is potential for eye contact, wear goggles and have eye flushing equipment immediately available. SKIN PROTECTION: Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact. Consult the glove/clothing manufacturer to determine the appropriate type glove/clothing for a given application. Wash immediately if skin is contaminated. Launder contaminated clothing and clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoroughly after handling. RESPIRATORY PROTECTION: Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 C.F.R. 1910.134. VENTILATION: Provide natural or mechanical ventilation to minimize exposure. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment. Consult NFPA Standard 91 for design of exhaust systems. ATRBORNE EXPOSURE LIMITS: OSHA and ACGIH have not established specific exposure limits for this material. However, OSHA and ACGIII have established limits for particulates not otherwise classified (PNOC) which are the least stringent exposure limits applicable to dusts. OSHA PEL ACGIH TLV 15 mg/m3 (total dust) 8-hr TWA 10 mg/m3 (inhalable) 8-hr TWA 5 mg/m3 (respirable) 8-hr TWA 3 mg/m3 (respirable) 8-hr TWA Components referred to herein may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

Section 9 - Physical and Chemical Properties

Appearance: White, crystalline, free-flowing granules or powder

Odor: None

pH: 12.0 (as a 1% solution @ 25 degrees C) Solubility in Water (g/100 g H20): 11.6 @ 25 degrees C 17.5 @ 40 degrees C 35.3 @ 60 degrees C 61.3 @ 80 degrees C 84.5 @ 100 degrees C

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Section 10 - Stability and Reactivity

STABILITY: Product is stable under normal conditions of storage and handling.

MATERIALS TO AVOID: This material could be corrosive to aluminum surfaces because of high pH.

HAZARDOUS DECOMPOSITION PRODUCTS: None known

HAZARDOUS POLYMERIZATION: Will not occur

Section 11 - Toxicological Information

This material has been defined as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200). Data from Astaris single-dose (acute) animal studies with this material are given below: Oral - rat LD50: 6,500 mg/kg; practically nontoxic Dermal - rabbit LD50: > 7,940 mg/kg; practically nontoxic Eye Irritation - rabbit (4-hr exp.): corrosive Skin Irritation - rabbit: 3.3/8.0; moderately irritating The anhydrous form of this material produced no mutagenic effects in standard assays using fruit flies.

12. Ecological Information

The following data have been classified using the criteria adopted by the European Economic Community (EEC) for aquatic organism toxicity. Invertebrate: 48-hr EC50 Daphnia magna: >1000 mg/L; Practically Nontoxic Warmwater Fish: 96-hr LC50 Bluegill sunfish: 440 mg/L; Practically Nontoxic Coldwater Fish: 96 hr LC50 Rainbow trout: 260 mg/L; Practically Nontoxic No definitive algal toxicity data was available for this material. No definitive biodegradation data was available for this material.

13. Disposal Consideration

This material when discarded is not a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. Dry material may be landfilled or recycled in accordance with local, state and federal regulations. Consult your attorney or appropriate regulatory officials for information on such disposal.

14. Transport Information

The data provided in this section is for information only.

Hazard Class: No found

Identification Number: No found

Packing Group: No found

15. Regulatory Information

TSCA Inventory: Listed DSL Inventory: Listed WHMIS Classification: D2(B) — Materials Causing Other Toxic Effects SARA Hazard Notification Hazard Categories Under Title III Rules (40 CFR 370): Immediate Section 302 Extremely Hazardous Substances: Not Applicable Section 313 Toxic Chemical(s): Not Applicable CERCLA Reportable Quantity: 5,000 lb RQ of Trisodium Phosphate Crystalline Release of more than 5,000 pounds of this product to the environment in a 24 hour period requires notification to the National Response Center (800 424 8802 or 202-426 2675). Refer to Section 11 for OSHA Hazardous Chemical(s) and Section 13 for RCRA classification This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation and the MSDS contains all the information required by the Canadian Controlled Products Regulation. Refer to Section 11 for OSHA/HPA Hazardous Chemical(s) and Section

16,0ther Information

PRODUCT.

Disclaimer: All information, recommendations and suggestions appearing herein are based upon sources believed to be reliable: However, it is the users responsibility to determine the safety, toxicity and suitability for its own use of this product. CHENGOU BOON STREAM CHEMICAL INDUSTRY CO., LTD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE USE BY OTHERS OFTHIS

This safety data sheet should be used in conjunction with technical sheets. It does not replace them.

The information given is based on our knowledge of this product, at the same time of publication.

It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any Excuses the user from knowing and applying all the regulations governing his activity. It is the aloe Responsibility of the user to take all precaution required in handling the product. The aim of mandatory Regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products. This information is not exhaustive. This does not exonerate the user from ensuring that legal obligations, other than those mentioned, relating to the use and storage of the product, do not exist. This is solely his Responsibility