

Material Safety Data Sheet

Sodium Hypophosphite

Section 1 - Chemical Product and Company Identification

MSDS Name : Sodium Hypophosphite
Synonyms : Sodium Phosphinate
Company Identification : Tradeasia International Pte Limited
Email: : contact@chemtradeasia.com

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
10039-56-22	Sodium Hypophosphite	100

Section 3 - Hazards Identification

Emergency Overview: Granular powder, contact with eyes and skin may cause irritation. Inhalation of dusts or fume may cause irritation to respiratory tract. Hazard symbols for this product: Not classified.

Risk Phrases – None. Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Potential Health Effects: Inhalation: Inhalation of mists or vapors may cause irritation to upper respiratory tract and mucous membranes.

Skin: Contact with skin may cause irritation, dermatitis.

Eyes: Contact with eyes may cause pain and irritation.

Ingestion: May be irritating to digestive tract; may cause gastric distress, stomach pains.

Carcinogenicity: NTP No, **ARC MONOGRAPHS:** No, **OSHA REGULATED:** No

Section 4 - First Aid Measures

Inhalation: Remove affected person to fresh air; if symptoms persist seek medical attention.

Skin: Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

Eyes: Check for and remove contact lenses. Flush eyes with water for 15 minutes; if irritation persists, seek medical attention.

Ingestion: Give two glasses of water for dilution; DO NOT induce vomiting; never give anything by mouth to an unconscious person; seek medical attention.

Section 5 - Fire Fighting Measures

Flash Point (Method used): Non-flammable, **Flammable Limits: LEL:** Not applicable, **UEL:** Not applicable, **Autoignition Temperature:** Not determined, **NFPA Class:** None

General Hazards: Product is not considered flammable or combustible. Products of combustion include compounds of phosphorus, toxic oxides of phosphorus and spontaneously flammable phosphine gas.

Extinguishing Media: Carbon dioxide, water, water fog, dry chemical, chemical foam.

Fire Fighting Procedure: Decomposes violently when 100% sodium hypophosphite is heated above 200°C (392°F) and will yield toxic oxides of phosphorus and phosphine gas. Under these conditions, DO NOT extinguish flames due to the possibility of phosphine gas accumulation. Use water spray to cool containers.

Unusual Fire / Explosion Hazards: Phosphine gas liberated during overheating of 100% sodium hypophosphite is extremely flammable and toxic. It reacts violently with oxygen and halogens.

Hazardous Combustion Products: Smoke, fumes or vapors, toxic oxides of phosphorus and spontaneously flammable phosphine gas.

Section 6 - Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Small spills - wash to sanitary sewer with plenty of water. Large spills - Recover and segregate product for reuse; shovel product into approved container for disposal.

Section 7 - Handling and Storage

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse. Store containers in a cool, dry, ventilated, fire resistant area away from direct heat and separated from oxidizers. Keep this and other chemicals out of reach of children.

Section 8 - Exposure Controls, Personal Protection

ENGINEERING CONTROLS: The use of local exhaust ventilation is recommended. No other special controls are indicated.

PERSONAL PROTECTION: RESPIRATORY PROTECTION: None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds standard workplace limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

PROTECTIVE GLOVES: Neoprene, butyl or nitrile rubber gloves with cuffs.

EYE PROTECTION: Chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Coveralls, apron, or other equipment should be worn to minimize skin contact, safety eyewash station nearby.

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

Section 9 - Physical and Chemical Properties

Appearance and Odor	: White Crystalline Solid,
Odorless	
Physical State	: Solid
Vapor Pressure (MM Hg)	: mm Hg 20° C
Vapor Density (Air=1)	: Not Applicable

Specific Gravity (Water=1)	: Not
Specified	
Evaporation Rate (WATER= 1)	: Not Applicable
Solubility in Water	: Complete
Freezing Point	: Not determined
pH	: 5.5 – 8.5 Aqueous
Solution	
Viscosity	: Solid
Volatile Organic Compounds (Total VOC's)	: None
Boiling Point	: Decomposes at >200° C
Other Information	: Dehydrates @ 100° C (The
water of hydration is lost)	

Section 10 - Stability and Reactivity

Stability: Stable

Conditions to Avoid: Avoid generating airborne dust.

Incompatibility (Materials to Avoid): Strong oxidizers, strong acids.

Hazardous Decomposition or Byproducts: Decomposition will not occur if handled and stored properly. Violent, explosive decomposition may occur when this product is heated to > 200°C. In case of a fire, phosphorus compounds, toxic oxides of phosphorus and spontaneously flammable phosphine gas may be produced.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None.

Section 11 - Toxicological Information

Oral: INH-RAT LD50: 7640mg / kg Oral - rat

CHRONIC/CARCINOGENICITY: No evidence available

Section 12 - Ecological Information

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

Section 13 - Disposal Considerations

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. Product is classified as non -hazardous, however, non-hazardous materials may become hazardous waste upon contact with other products. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

Section 14 - Transport Information

Proper Shipping Name: Non- Hazardous for Transport

DOT Hazard Class / Pack Group: Not regulated

IATA Hazard Class / Pack Group: Not regulated

Reference: Not Applicable

IMDG Hazard Class: Not regulated

UN/NA Identification Number: None

RID/ADR Dangerous Goods Code: Not regulated

Label: None Required

UN TDG Class / Pack Group: Not regulated

Hazard Symbols: None

Hazard Identification Number (HIN): None

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EC, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

Section 15 - Regulatory Information

TSCA Toxic Substance Control Act): All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA Title III (311,312): 311/312 Hazard Categories: None, 313 reportable Ingredients:None

CERCLA Hazardous Substance: None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

CPR (Canadian Controlled Products Regulations): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: Not controlled.

IDL (Canadian Ingredient Disclosure List): Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Sodium hypophosphite monohydrate is not listed on the Canadian DSL or NDSL because it is a hydrate. The CAS number for the anhydrous form is on the list. All other components of this product identified by CAS number are listed on the DSL or NDSL.

EINECS (European Inventory of Existing Commercial Chemical Substances): Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

EC Risk Phrases	Symbol (s) Required For Label	EC Safety Phrases
Not Classified.	None	S2 Keep out of the reach of children S24/25 Avoid contact with skin and eyes

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

The information above is believed to be accurate and represents the best 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. In no way shall Tradeasia International Pte. Ltd. Be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Tradeasia International Pte. Ltd. has been advised of the possibility of such damages.