TULSTAR PRODUCTS, INC.
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MATERIAL SAFETY DATA SHEET

Company Information

Company's Information:	**TULSTAR PRODUCTS, INC.** 5510 S Lewis Avenue Tulsa, OK 74105
Phone Number:	(918) 749-9060
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Emergency Phone Number:	CHEMTREC 800-424-9300 (24 hours)

Product Information

Product Name:	Sodium Hypophosphite Monohydrate
Synonyms:	Phosphinic Acid Sodium Salt Monohydrate; Sodium Hypophosphite Monohydrate
CAS Number:	10039-56-2
Formula:	$NaH_2PO_2 \cdot H_2O$
Appearance:	White

Hazards Identification

Caution! The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Decomposes generating flammable and toxic phosphine gas. Target organs unknown.

Potential Health Effects

Eye:	May cause eye irritation.
Skin:	May cause skin irritation.
Ingestion:	May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.
Inhalation:	May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.
Chronic:	No information found.

First Aid Measures

Eyes:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:	Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
Ingestion:	Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation:	Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician:	Treat symptomatically

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. Dusts at sufficient concentrations can form explosive mixtures with air. Combustion generates toxic fumes. Decomposes generating flammable and toxic phosphine gas.
Extinguishing Media:	Use agent most appropriate to extinguish fire. In case of fire use water spray, dry chemical, carbon dioxide, or appropriate foam.

Accidental Release Measures

General Information:	Use proper personal protective equipment.
Spills/Leaks:	Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Remove all sources of ignition. Provide ventilation.

Handling & Storage

Handling:	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.
Storage:	Store in a cool, dry, well-ventilated area away from incompatible substances.

Exposure Controls, Personal Protection

Engineering Controls:	Use adequate ventilation to keep airborne concentrations low.
OSHA Vacated PELs:	No OSHA Vacated PELs are listed for this chemical.
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 gloves to prevent skin exposure.
Clothing:	Wear appropriate protective clothing to minimize contact with skin.
Respirators:	Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Physical & Chemical Properties

Physical State:	Solid
Appearance:	White
Odor:	Odorless
pH:	Not available.
Vapor Pressure:	Negligible
Vapor Density:	Not available.
Evaporation Rate:	Negligible
Viscosity:	Not available.
Boiling Point:	Decomposes
Freezing/Melting Point:	90°C
Auto ignition Temperature:	Not available.
Flash Point:	Not available.
NFPA Rating:	Explosion Limits
	Lower: N/A
	Upper: N/A
Decomposition Temperature:	>90°C
Solubility:	Soluble in water
Specific Gravity/Density:	0.8
Molecular Formula:	$NaH_2PO_2 \cdot H_20$
Molecular Weight:	87.9764

Stability & Reactivity

Chemical Stability:	Stable. However, may decompose if heated.
Conditions to Avoid:	High temperatures, incompatible materials, dust generation, moisture.
Incompatibilities with Other Materials:	Strong oxidizers, moisture.
Hazardous Decomposition Products:	Phosphine, irritating and toxic fumes and gases, toxic fumes of sodium oxide, hydrogen gas.
Hazardous Polymerization:	Has not been reported.

Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part. Additionally, waste generators must consult state and local hazardous waste regulations ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.