

Section 1: Product & Company Information

Product Identifier: Sodium Hexametaphosphate (All Grades)

Other Means of Identification

Product Number: 132001
132011

Recommended Use and Restrictions on Use

Recommended Use: For Commercial Use.
Restrictions on Use: Do not use as a pesticide.

Manufacturer / Importer / Supplier / Distributor Information

Company Name: CORECHEM Inc.
Address: 4320 Greenway Drive
Knoxville, TN 37918 USA

Information Telephone Number: 1-865-524-4239

Fax Number: 1-865-524-3375

Website: www.corecheminc.com

Contact Person: Regulatory Manager

E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

Section 2: Hazards Identification

GHS Hazard Classification(s)

Not classified as hazardous according to OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Section 3: Composition/Information on Ingredients

Substance

Chemical Identity ²	Common Name/Synonym(s)	CAS # ³	Weight %	Impurity or Stabilizing Additive
Sodium Hexametaphosphate	Sodium Hexametaphosphate (Tech, Granular, Plate, Flake)	68915-31-1	100 %	None

- Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
- Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
- "—"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information

Sodium Hexametaphosphate is a glassy, white solid found in plate, granular or powder forms. Dusts of this product may cause mild irritation to the eyes, skin, nose and throat. Sodium Hexametaphosphate may react violently with strong oxidizers. Product is not combustible. Use extinguishing media for surrounding fire. Thermal decomposition of this product produces irritating vapors and toxic gases. (e.g. phosphorous oxides and sodium oxide.) Emergency responders should wear proper personal protective equipment for the release in which they are responding.

Inhalation

Remove source of contamination or move victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Get immediate medical attention.

Skin Contact

Remove all contaminated clothing. For skin contact, wash thoroughly with soap and water for at least 20 minutes. Seek immediate medical attention if irritation develops or persists.

Eye Contact

In case of contact with eyes, rinse immediately with plenty of water for at least 20 minutes. Seek immediate medical attention if any adverse effects occur.

Ingestion

Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Immediately give large amounts of water. If vomiting occurs naturally, rinse mouth and repeat administration of water. Obtain medical advice immediately. Never give anything by mouth to victim who is unconscious or having convulsions.

Most important symptoms/effects, acute and delayed**Symptoms**

Exposure to particulates or solution of this product may cause mild irritation of the eyes with symptoms such as stinging, tearing, redness or pain. Alkalies Penetrate the skin slowly. The extent of damage therefore depends on duration of contact. Chronic poisoning (from skin contact) may occur. Repeated skin contact may lead to dermatitis (red, cracked skin) Symptoms are generally alleviated when exposure ends. Ingestion of this product (Especially in large volumes) can be irritating because of its alkalinity and hypertoxicity to the tissues of the mouth, esophagus, and other tissues of the digestive system. Symptoms of exposure can include vomiting, diarrhea, and nausea. This compound is thought to be hydrolyzed to (ortho) phosphates before absorption, which may include a metabolic acidosis. If appreciable amounts of the intact polymer are absorbed from the alimentary tract, hypocalcemia tetany may be a danger due to the binding (Chelation) of ionized calcium. Hypocalcemia tetany apparently occurred in a single case of water softener poisoning. The estimated fatal dose of sodium phosphates is 50 g.

Indication of immediate medical attention and special treatment needed**Hazards**

No data available.

Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Treatment

Provide general supportive measures and treat systematically.

Section 5: Fire-Fighting Measures**General Fire Hazards**

Sodium Hexametaphosphate is not combustible and does not contribute to the intensity of a fire. Closed containers exposed to heat may explode. When involved in a fire, this material may decompose and produce irritating vapors, acrid smoke and toxic gases. If heated to very high temperatures, this material may melt, with the production of steam through water loss.

Suitable (and Unsuitable) Extinguishing Media**Suitable Extinguishing Media**

Dry chemical, CO₂, alcohol-resistant foam or water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Do not scatter spilled material with high pressure water streams.

Specific Hazards Arising from the Chemical

Hazardous Combustion Products: Thermal decomposition can lead to release of irritating and toxic gases and vapors. Sodium Oxides. Phosphorus oxides.

Special Protective Equipment and Precautions for Firefighters**Special Fire-Fighting Equipment Procedures**

Firefighters should wear full protective clothing including self-contained breathing apparatus. If possible, control runoff from fire control or dilution water to prevent environmental contamination.

Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures**Personal Precautions, Protective Equipment and Emergency Procedures**

Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Keep unauthorized personnel away. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate area. Evacuate the area promptly and keep upwind of spilled material. Isolate the spill area to prevent people from entering. In case of large spills, follow all facility emergency response procedures. Remove soiled clothing and launder before reuse. Avoid all skin contact with the spilled material. Have emergency equipment readily available.

Methods and Materials for Containment and Clean-Up

Stop the flow of the material, if this can be done without risk. Contain the discharged material. If sweeping of a contaminated area is necessary use a dust suppressant agent, which does not react with the product. Small releases can be cleaned-up wearing gloves, goggles and suitable body protection. In case of a large spill (in which excessive dusts can be generated) clear the affected area, protect people, and respond with trained personnel. Do not allow the spilled product to enter public drainage systems or open water courses. Place all spill residues in an appropriate container and seal. Thoroughly wash the area after a spill or leak cleanup. Prevent spill rinsate from contamination of storm drains, sewers, soil or groundwater.

Notification Procedures

Notify authorities if any exposure to the general public or environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained.

Environmental Precautions

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Precautions for Safe Handling

All employees who handle this material should be trained to handle it safely. Do not breath dust. Avoid all contact with skin and eyes. Wherever dust clouds may be generated, eliminate sparks, flames and other ignition sources. Use this product only with adequate ventilation. Periodically wash-down areas where this product is used to avoid dust accumulation. Wash thoroughly after handling.

Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed when not in use. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals. (See section 10 for stability and reactivity.) Storage areas should be made of fire-resistant materials. Post warning and NO SMOKING signs in storage and use areas as appropriate. Use corrosion resistant structural materials, lighting, and ventilation systems I the storage areas. Floors should be sealed to prevent absorption of this material. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Have appropriate extinguishing equipment I the storage area. (i.e. sprinkler system, portable fire extinguishers.) Empty containers may contain residual particulates; therefor, empty containers should be handled with care. Do not store this material in open or unlabeled containers. Limit quantity of material stored.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Value	Source
Sodium Hexametaphosphate	TWA (total dust)	15 mg/m ³	US OSHA Table Z-1
Sodium Hexametaphosphate	TWA (respirable fraction)	5 mg/m ³	US OSHA Table Z-1
Sodium Hexametaphosphate	TWA (inhalable fraction)	4 mg/m ³	US. ACGIH Threshold Limit Values
Sodium Hexametaphosphate	TWA (Respirable fraction)	1.5 mg/m ³	US. ACGIH Threshold Limit Values

Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

Appropriate Engineering Controls

Use engineering methods to control hazardous conditions. This includes exhaust ventilation directly to the outside and using a corrosion- resistant ventilation system sperate from other exhaust ventilation systems.

Individual protection measures, such as personal protective equipment (PPE)

General Information

None required where adequate ventilation conditions exist. If airborne concentrations are high, use an appropriate respirator or dust mask. If airborne concentrations are above the applicable exposure limits, use NIOSH- approved respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. federal OSHA Standard (29 CFR 1910.134) Applicable U.S. State regulations. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use a full- facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA'S Respiratory Protection Standard.

Eye/Face Protection

Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

Skin Protection

Hand Protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory Protection

None required where adequate ventilation conditions exist. If airborne concentrations are high, use an appropriate respirator or dust mask. If airborne concentrations are above the applicable exposure limits, use NIOSH- approved respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. federal OSHA standard (29 CFR 1910.134) applicable U.S. State regulations. Oxygen levels below 19.5 are considered IDLH by OSHA. In such atmospheres, use a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA'S Respiratory Protection Standard. (1910.134-1998).

Hygiene Measures

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

Section 9: Physical and Chemical Properties

Appearance:	
Physical State:	White plate, Granule, or Powder
Color:	White
Odor:	Odorless
Odor Threshold:	No data available.
pH:	No data available.
Melting Point/Freezing Point:	550°C / 1022°F
Initial Boiling Point and Boiling Range:	1500°C / 2,732°F
Flash Point:	Not applicable.
Evaporation Rate (butyl acetate=1):	No data available.
Flammability (solid, gas):	No data available.
Upper/Lower Limit on Flammability or Explosive Limits	
Flammability Limit – Upper:	Not applicable.
Flammability Limit – Lower:	Not applicable.
Explosive Limit – Upper:	Not applicable.
Explosive Limit – Lower:	Not applicable.
Vapor Pressure:	No data available.
Vapor Density (air =1):	Not applicable.
Relative Density (water=1):	No data available.
Solubility(ies):	
Solubility in water:	Freely Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-Ignition Temperature:	Not applicable.
Decomposition Temperature:	Not applicable.
Viscosity:	No data available.
Specific Gravity:	1.25
Other Information:	
Molecular Weight:	611.52
Formula:	No data available.

Section 10: Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical Stability

Material is stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Avoid high temperatures, Exposure to air, moisture and incompatible materials. Dust formation, protection from moisture.

Incompatible Materials

This material is incompatible with oxidizers-reactions may be violent.

Hazardous Products

Carbon Dioxide, Carbon monoxide, and oxides of Sodium and phosphorous. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: No data Available
Inhalation: May cause respiratory Tract irritation
Skin Contact: May cause skin Irritation
Eye Contact: May cause eye irritation

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Sodium Hexametaphosphate: LD50 (Rat) 6,200 mg/kg

Dermal

No Data Available

Inhalation

No Data Available

Repeated Dose Toxicity

No Data Available

Skin Corrosion/Irritation

Alkalis penetrate skin slowly. The extent of damage therefor depends on duration of contact. Chronic poisoning (from skin contact) may occur. Repeated skin contact may lead to dermatitis. (red cracked skin) Symptoms are generally alleviated when exposure ends.

Serious Eye Damage/Eye Irritation

Exposure to particulates or solution of this product may cause mild irritation of the eyes with symptoms such as stinging, tearing, redness and pain.

Respiratory/Skin Sensitization

Breathing dusts or particulates generated by this product can lead to irritation of the nose, throat or respiratory system. Symptoms of such exposure could include coughing, sneezing, and chest discomfort. Symptoms are generally alleviated when exposure ends.

Carcinogenicity

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Germ Cell Mutagenicity

In Vitro

No mutagenic components identified.

In Vivo

No mutagenic components identified.

Reproductive Toxicity

None known.

Specific Target Organ Toxicity - Single Exposure

None known.

Specific Target Organ Toxicity - Repeated Exposure

None known.

Aspiration Hazard

Not classified.

Other Effects

None known.

Section 12: Ecological Information

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish

No data available.

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Chronic Hazards to the Aquatic Environment

Fish

No data available.

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Persistence and Degradability

Biodegradation

There are no data on the degradability of this product.

BOD/COD Ratio

No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

No data available.

Mobility in Soil

The product is water soluble and may spread in water systems.

Other Adverse Effects

No data available.

Section 13: Disposal Considerations

Disposal Instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Contaminated Packaging

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

Section 14: Transportation Information

US Department of Transportation (DOT)

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation in accordance with 49 CFR 172.101.

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: No
Sudden Release of Pressure: No
Reactive: No
Acute (Immediate) Health No
Hazard:
Chronic (Delayed) Health No
Hazard:

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Section 16: Other Information**Hazardous Materials Identification System (HMIS®) Classification**

Health Hazard: 0
Chronic Health Hazard: /
Flammability: 0
Physical Hazard: 0
Personal Protection: X
(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

National Fire Protection Association (NFPA 704) Rating

Health Hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0
Special: N/A
(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

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Key to Abbreviations and**Acronyms**

ATE - Acute Toxicity Estimate	ACGIH - American Conference of Industrial Hygienists
BCF - Bioconcentration Factor	AIHA - American Industrial Hygiene Association
EC50 - Effective concentration, 50%	BEI - Biological Exposure Indices
IDHL - Immediately Dangerous to Life and Health	CAS - Chemical Abstracts Service
Kg - Kilogram	DOT - US Department of Transportation
l - Liter	EPA - US Environmental Protection Agency
lb - Pound	GHS - Globally Harmonized System of Classification and Labelling of Chemicals
LC50 - Lethal Concentration, 50%	IARC - International Agency for Research on Cancer
LD50 - Lethal Dose, 50%	IATA - International Air Transport Association
mg - milligram	IBC - Intermediate Bulk Container
ml - milliliter	IMDG - International Maritime Dangerous Goods
N/A - Not Applicable	NIOSH - National Institute for Occupational Safety and Health
N/D - Not Determined	NTP - National Toxicology Program
PEL - Permissible Exposure Limit	OSHA - US Occupational Health and Safety Administration
REL - Recommended Exposure Limit	SARA - US EPA Superfund Amendments and Reauthorization Act
STEL - Short-term Exposure Limit	TSCA - US EPA Toxic Substances Control Act
TWA - Time weighted average	UN - United Nations

References

HSDB® - Hazardous Substances Data Bank

Disclaimer

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