



***** Section 1 - Identification *****

Chemical Name: Sodium Hexametaphosphate Coarse Powder, Granular or Plate as Technical , FCC certified grades

Product Use: For Commercial Use

RESTRICTIONS on USE

NOT TO BE USED AS A PESTICIDE. THIS PRODUCT IS NOT TO BE USED IN VIOLATION OF ANY PATENTS. LEVEL 7 CHEMICAL DISCLAIMS ANY AND ALL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR APPLICATION. IN NO EVENT SHALL LEVEL 7 CHEMICAL OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER INCLUDING DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, LOSS OF BUSINESS PROFITS OR SPECIAL DAMAGES, EVEN IF LEVEL 7 CHEMICAL OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OF LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES SO THE FOREGOING LIMITATION MAY NOT APPLY.

Manufacturer: Quimir

Supplier Information

Level 7 Chemical

255 Sturgis Rd

Conway, AR 72034

Phone: (855) 927-1777

Emergency # (800) 424-9300

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

***** Section 2 – Hazard(s) Identification *****

GHS HAZARD

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Classification of the substance or mixture: Not a hazardous substance or mixture.

Label elements, including precautionary statements: Not a hazardous substance or mixture.

Hazards not otherwise classified (HNOC): No data available

***** Section 3 - Composition/information on Ingredients *****

CAS #	Component	Percent
68915-31-1	Sodium Hexametaphosphate	> 90

This product, commonly called “sodium hexametaphosphate” or “sodium polyphosphates glassy”, is a mixture of many polymers for which the CAS number is 68915-31-1, the chemical formula is $\text{Na}_{(x+2)}\text{P}_x\text{O}_{(3x+1)}$ where $x=6$ to 21. An alternate CAS number 10124-56-8 is specific for sodium hexametaphosphate, $\text{Na}_6\text{O}_{18}\text{P}_6$, molecular weight 611.77.

Synonyms: SHMP, Glassy sodium, Vitrafos, Metafos, Sodium polyphosphate, Metaphosphoric acid, Sodium metaphosphate

**** Section 4 - First Aid Measures ****

Emergency Overview

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 appropriate 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 releases to which they are responding.

Description of first aid measures:

In case of 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 effect occurs.

In case of 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.

In case of 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 a victim who is unconscious or having convulsions.

If inhaled: 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.

Symptoms and potential health effects:

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

Skin: Alkalies penetrate 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: 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 induce a metabolic acidosis. If appreciable amounts of the intact polymer are absorbed from the alimentary tract, hypocalcemic tetany may be a danger due to the binding (chelation) of ionized calcium. Hypocalcemic tetany apparently occurred in a single case of water softener poisoning. The estimated fatal dose of sodium phosphates is 50 g.

Inhalation: 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.

Notes to Physician and Special Treatment:

Provide general supportive measures and treat symptomatically.

*** * * 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.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide, and oxides of sodium and phosphorus.

Extinguishing Media

Use methods for the surrounding fire and other materials involved in the fire.

Fire Fighting Equipment/Instructions

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.

NFPA Ratings: Health: 1 Fire: 0 Instability: 0 Other: None

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal precautions

Evacuate the area promptly and keep upwind of the 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 laundry 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 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 product (see Section 10 for incompatibility information). 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. Place all spill residues in an appropriate container and seal. Thoroughly wash the area after a spill or leak clean-up.

Environmental precautions

Prevent spill rinsate from contamination of storm drains, sewers, soil or groundwater.

*** Section 7 - Handling and Storage ***

Handling Procedures

All employees who handle this material should be trained to handle it safely. Do not breathe 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.

Storage Procedures

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, 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 in the storage area. 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 in the storage area (i.e., sprinkler system, portable fire extinguishers).

Empty containers may contain residual particulates; therefore, 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 ***

Exposure Guidelines

Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits or any of this product's components.

Component	CAS #	Value	Type/Regulation
Particulates Not Otherwise Classified	N/A	10 mg/m ³ 3 mg/m ³ 15 mg/m ³	ACGIH – TWA (inhalable fraction) ACGIH – TWA (respirable fraction) OSHA – TWA (total dust)

		5 mg/m ³ 4 mg/m ³ 1.5 mg/m ³	OSHA – TWA (respirable fraction) DFG MAKs – TWA (inhalable fraction) DFG MAKs – TWA (respirable fraction)
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Engineering Controls

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

PERSONAL PROTECTIVE EQUIPMENT

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132). Please reference applicable regulations and standards for relevant details.

Personal Protective Equipment: Eyes/Face

Wear chemical safety goggles. If necessary, refer to U.S. OSHA 29 CFR 1910.133.

Personal Protective Equipment: Skin

Use impervious gloves. Gloves should be tested to determine their suitability for prolonged contact with this material. If necessary, refer to U.S. OSHA 29 CFR 1910.138.

Personal Protective Equipment: Respiratory

None required where adequate ventilation conditions exist. If airborne concentration is 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 of 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).

Personal Protective Equipment: General

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Protective Clothing Pictograms:



Splash Goggles



Gloves



Protective Apron



Dust Respirator

* * * Section 9 - Physical & Chemical Properties * * *

Physical Properties:

Physical State:	Solid
Appearance:	White plate, granules, or powder
Odor:	Odorless
Odor Threshold:	Not applicable
pH:	7.0 (1% solution)
Melting Point/Range:	550 °C (1022 °F)
Boiling Point/Range:	Not applicable
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability:	Not flammable
Flammability/Explosive Limits:	Not applicable
Vapor Pressure:	Zero
Vapor Density:	Not applicable
Specific Gravity:	1.25

Solubility in Water:	Complete
Partition Coefficient:	Not determined
Autoignition Temperature:	Not applicable
Decomposition Temperature:	Not determined
Viscosity:	Not applicable
Molecular Weight:	Varies
Softening Point:	Not applicable
Particle Size:	Not determined
Bulk Density:	Not determined

Additional Information

The data provided in this section are to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

Product is normally stable.

Chemical Stability: Conditions to Avoid

Avoid high temperatures, exposure to air, moisture and incompatible materials.

Incompatibility

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

Hazardous Decomposition

Carbon dioxide, carbon monoxide, and oxides of sodium and phosphorus.

Hazardous Polymerization

Will not occur.

*** Section 11 - Toxicological Information ***

Acute and Chronic Toxicity

A: General Product Information

Poisonous by intravenous route. Mildly toxic by intraperitoneal, ingestion and subcutaneous routes. Chronic: Long term skin overexposure to this product may lead to dermatitis (red, itchy skin).

Sodium and potassium hexametaphosphates, polyphosphates, tripolyphosphates, pyrophosphates, and other phosphates used as water softeners form complexes with calcium and, after ingestion, are capable of seriously reducing the serum level of ionic calcium. They have less corrosive effect on mucous membranes than sodium or potassium hydroxide. Hydrolysis of the polymeric phosphates can also produce acidosis.

B: Component Analysis

Sodium

Hexametaphosphate:

Route of Exposure	Test Type and Value
Oral:	LD ₅₀ (rat) = 3053 mg/kg LD ₅₀ (mouse) = 7552 mg/kg
Inhalation:	Not determined
Dermal:	LD ₅₀ (mouse, subcutaneous) = 1300 mg/kg
Intraperitoneal:	LD ₅₀ (rat) = 870 mg/kg
Intravenous:	LD ₅₀ (mouse) = 62 mg/kg LD ₅₀ (rabbit) = 140 mg/kg

Carcinogenicity

A: General Product Information

Sodium Hexametaphosphate is not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

B: Component Carcinogenicity

No information available.

Mutagenicity

No information available.

Teratogenicity

No information available.

Other Toxicological Information

No information available

*** Section 12 - Ecological Information ***
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Toxicity: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: No data available

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted: No data available

Other adverse effects: No data available

US EPA Waste Number & Descriptions *** Section 13 - Disposal Considerations ***
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A: General Product Information

As shipped, product is not considered a hazardous waste by the EPA.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations or with. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

***** Section 14 - Transportation Information *****

NOTE: The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under I.M.O., I.C.A.O. (I.A.T.A.) and 49 CFR to assure regulatory compliance.

US DOT Information

UN/NA #: Not Applicable

Shipping Name: Non-regulated

Hazard Class: Not Applicable

Packing Group: Not Applicable

Required Label(s): None

Additional Info:: When shipped as a single bulk package equal to 5000 pounds or more, this material is regulated as a U.S. DOT hazardous material as the following: RQ, UN 3077, Environmentally Hazardous Substance, Solid, n.o.s., (sodium phosphate, tribasic), 9, PG III, Label Class 9.

International Air Transport Association (IATA):

For Shipments by Air transport: not considered hazardous.

Please refer to the most recent Amendment of the "International Maritime Dangerous Goods (IMDG) Code"

***** Section 15 - Regulatory Information *****

US Federal Regulations

A: General Product Information

Sodium Hexametaphosphate is Generally Accepted as Safe (GRAS) when used as a food additive for humans or animals, when used in accordance with good manufacturing practice or feeding practice. In addition, under FIFRA, residues of Sodium Hexametaphosphate surfactant, wetting agent are excepted from the tolerance requirements when used as a suspending agent or buffer, when used in accordance with good agricultural practices as inert (or occasionally active) ingredients in pesticide formulations, applied to growing crops or to raw agricultural commodities after harvest.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Sodium Hexametaphosphate (68915-31-1, alt 10124-56-8)

SARA 302 There are no specific Threshold Planning Quantities for Sodium Hexametaphosphate. The default Federal (EHS TPQ) MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

CERCLA: Final RQ = 5000 pounds (2270 kg) (Listed under 'Sodium phosphate, tribasic')

C: Sara 311/312 Tier II Hazard Ratings:

Component	CAS #	Fire Hazard	Reactivity Hazard	Pressure Hazard	Immediate Health Hazard	Chronic Health Hazard
Sodium Hexametaphosphate	68915-31-1	No	No	No	No	No

State Regulations

A: General Product Information

California Proposition 65

Sodium Hexametaphosphate is not on the California Proposition 65 chemical lists.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substance lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
Sodium Hexametaphosphate	68915-31-1	Y	N	Y	N	Y	Y

Other Regulations**A: General Product Information**

No other information available.

B: Component Analysis - Inventory

Component	CAS #	TSCA
Sodium Hexametaphosphate	68915-31-1	Yes Active

***** Section 16 - Other Information *******Other Information**

Level 7 Chemical shall not be responsible for the use of any information, product, method, or apparatus herein presented ("Information"), and you must make your own determination as to its suitability and completeness for your own use, for the protection of the environment, and for health and safety purposes. You assume the entire risk of relying on this Information. In no event shall Level 7 Chemical be responsible for damages of any nature whatsoever resulting from the use of this product or products, or reliance upon this Information. By providing this Information, Level 7 Chemical neither can nor intends to control the method or manner by which you use, handle, store, or transport Level 7 Chemical products. If any materials are mentioned that are not Level 7 Chemical products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed. Level 7 Chemical makes no representations or warranties, either express or implied of merchantability, fitness for a particular purpose or of any other nature regarding this information, and nothing herein waives any of Level 7 Chemical's conditions of sale. This information could include technical inaccuracies or typographical errors. Level 7 Chemical may make improvements and/or changes in the product (s) and/or the program (s) described in this information at any time.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration