SODIUM HEXAMETA PHOSPHATE
SAFETY DATA SHEET
ACCORDING TO SANS 10231

Revision Date: 15.11.2018

Section 1 - Chemical Product and Company Identification

1.1Product Identifier

Product name: Sodium Hexameta Phosphate

CAS No: 68915-31-1

1.2Synonyms: Hexametaphosphate, sdodium salt; SHMP; Metaphosphoric acid, hexasodium; Sodium polyphates, glassy

1.3Company Information

Rolfes Chemicals

A Division of Rolfes Group of Companies

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Germiston

Information (Product safety) Telephone: +27 11 873 0157 Fax: +27 11 8738480

1.4 Emergency Telephone Number

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Section 2 – Composition/ Information on Ingrédients

Hazard Classes	Hazard Categories
Skin irritation	**Category 3**
Eye irritation	**Category 2B**
Specific target organ toxicity single exposure	**Category 3**
Acute toxicity, oral	**Category 5**

Signal Word: Warning

Hazard Statements

PHYSICAL HAZARDS: None

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HEALTH HAZARDS:	H303 May be harmful if swallowed H315 Causes mild skin irritation. H319 Causes eye irritation H335 May cause respiratory irritation
ENVIRONMENTAL HAZARDS:	None
PRECAUTIONARY STATEMENTS:	P102: Keep out of reach of children P202: Do not handle until all safety precautions have been read and understood P261: Avoid breathing dust P280: Wear protective gloves, clothing and eye protection
RESPONSE STATEMENTS: call the	P301 +310+ P331: IF SWALLOWED: USA Immediately National POISON CENTER at 800-222-1222. DO NOT induce vomiting P303+P361+353: IF ON SKIN Take off immediately all contaminated clothing. Rinse skin with water P304+340: IF INHALED, Remove to fresh air and keep comfortable for breathing P305+P351: IF IN EYES rinse cautiously with water for at least 15 minutes P306+P361: IF ON CLOTHING, Take off contaminated clothing
STORAGE STATEMENTS:	P403: None
DISPOSAL STATEMENTS:	P501: Dispose of content and/or container in accordance with local, regional, national or international regulations

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Section 3 - Hazards Identification

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 $Na_{(x+2)}P_xO_{(3x+1)}$, where x=6 to 21. An alternate CAS number 10124- 56-8 is specific for sodium hexametaphosphate, $Na_6O_{18}P_6$, 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.

Hazard Statements

CAUTION! MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE EYE AND SKIN IRRITATION. Avoid contact with eyes and skin. Avoid breathing dusts. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation.

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.

Potential Health Effects: 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.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media	Product does not burn. Use appropriate extinguishing media for material that is supplying the fuel to the fire.
Unsuitable Extinguishing Media	Not Available
Specific Hazards Arising From the Chemical	Oxides of sodium and phosphorous.
Special Protective Equipment and Precautions for Fire-Fighters	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
Further Information	Not Available

Section 6 - Accidental Release Measures

Containment Procedures

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

Clean- Up Procedures

Small releases can be cleaned-up wearing gloves, googles and suitable body protection. In case of a large spill, clear the affected area, protect people, and respond with trained personnel. Do not allow the spilled product to enter public drainage system or open water courses. Place all spill residues in an appropriate container and seal. Thoroughly wash the area after a spill or leak clean up. Prevent spill rinsate from contamination of storm drain, sewers, soil or groundwater.

Evacuation Procedures

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.

Special Procedures

Remove solid clothing and launder before reuse. Avoid all skin contact with the spilled material. Have emergency equipment readily available.

Section 7 - Handling and Storage

Handling:	Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Avoid	ingestion and inhalation.
Storage:	Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits	CAS# 68915-31-1:	ACGIH TLV	10 mg/m3	TWA, 8h (inhalable)
		ACGIH TLV	3 mg/m3	TWA, 8h (respirable)
		OSHA PEL	15 mg/m3	TWA, 8h (total dust)
		OSHA PEL	5 mg/m3	TWA, 8h (respirable)

Personal Protective Equipment

Eyes: Wear safety glasses.

Skin: Wear chemical resistant gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:	Powder
Color:	White
Odor:	None
pH:	7 (1% solution in water)
Vapor Pressure:	Not applicable
Viscosity:	Not applicable
Boiling Point:	1500°C @ 760 mmHg

Freezing/Melting Point:	550°C
Autoignition Temperature:	Not applicable
Flash Point:	Not applicable
Explosion Limits: Lower:	Not applicable
Explosion Limits: Upper:	Not applicable
Decomposition Temperature:	Not available
Solubility in water:	Partially soluble <150 g/l
Specific Gravity/Density:	0.850 g/cm3 packed
Molecular Formula:	Na2O.P2O5
Molecular Weight:	611.52

Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Excessive moisture. The material is hygroscopic.
Incompatibilities with Other Materials:	Oxidizing agents.
Hazardous Decomposition Products:	Oxides of phosphorus and sodium may occur.
Hazardous Polymerization:	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 68915-31-1
LD50/LC50:	Acute oral toxicity, rat: 3 035 mg/kg Acute dermal toxicity, rabbit: >7940 mg/kg
Carcinogenicity:	Not classified based on available information.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: Do not empty into drains.

Ecotoxicity: CAS# 68915-31-1

Toxicity to fish : LC50 (Rainbow trout): >= 1,000 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 485 mg/l Exposure time: 48 h

LC 50 (Medina & Mysid shrimp): > 1,000 mg/l Exposure time: 96h

Persistence and Degradability: Inorganic compounds in contact with the soil, sub-surface or surface waters may be taken up by plants and utilized as essential nutrients. Phosphates may also form precipitates, usually with calcium or magnesium. The resultant compounds are insoluble in water and become a part of the soil or sediment. The term biodegradability, as such, is not applicable to inorganic compounds

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
SHIPPING NAME	None	None	None
HAZARD CLASS	None	None	None
UN NO.	None	None	None
PACKING GROUP	None	None	None

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Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:	None
Hazard Phrases:	None
Risk Phrases:	R 36/37/38 Irritating to eyes, respiratory system and skin.
Safety Phrases:	S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S 36 Wear suitable protective clothing.
WGK (Water Danger/Protection) :	Not controlled
Canada:	CAS# 6815-31-1 is listed on Canada's DSL List

US Federal:

TSCA :	CAS# 68915-31-1 is listed on the TSCA Inventory.

Section 16 - Other Information

All reasonable efforts were exercised to compile this SDS in accordance with GHS SANS 10234. The SDS provides information regarding the health, safety and environmental hazards, at the date of issue, to facilitate the safe receipt, use and handling of the product in the workplace. Rolfes Chemicals cannot anticipate or control all conditions under which the product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which the product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place as regards health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of the product. Although all reasonable efforts were exercised in the compilation of this SDS, Rolfes Chemicals does not expressly warrant the accuracy or assume any liability for the incompleteness of the information contained herein or any advice given. The product is sold and risk passes in accordance with the specific terms and conditions of sale.