

SAFETY DATA SHEET
Sodium Hexametaphosphate 40%

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Issued: 19/04/2023
Revision No: 2

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product identifier:

Product name: SHMP 40%

Relevant identified uses of the substance or mixture and uses advised against:

Identified uses: Industrial Chemical. Water treatment.

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification (SI 2019 No. 720):

Physical hazards: Not Classified.

Health hazards: Not Classified.

Environmental hazards: Not Classified.

Label elements:

Hazard statements: NC Not Classified.

Precautionary statements: P102 Keep out of reach of children.
P262 Do not get in eyes, on skin, or on clothing.
P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P314 Get medical advice/ attention if you feel unwell.

Other hazards:

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures:	Sodium hexametaphosphate	40-50%
CAS number:	10124-56-8	
EC number:	233-343-1	
Classification:	Not Classified.	

4. FIRST AID MEASURES

Description of first aid measures:

Inhalation:	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. If breathing stops, provide artificial respiration. For breathing difficulties, oxygen may be necessary. Get medical attention if any discomfort continues.
Ingestion:	Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie or belt. Maintain an open airway. Get medical attention if any discomfort continues.
Skin contact:	Remove affected person from source of contamination. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Continue to rinse. Get medical attention if symptoms are severe or persist after washing.
Eye contact:	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes. Get medical attention if irritation persists after washing.

Most important symptoms and effects, both acute and delayed:

Inhalation:	May cause coughing and difficulties in breathing.
Ingestion:	May cause discomfort if swallowed. May cause stomach pain or vomiting. May be harmful if swallowed.
Skin contact:	May cause irritation. Prolonged contact may cause dryness of the skin.
Eye contact:	May cause eye irritation.

Indication of any immediate medical attention and special treatment needed:

Notes for the doctor:	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media:	Water spray, foam, dry powder or carbon dioxide.
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Special hazards arising from the substance or mixture:

Specific hazards:	None known.
Hazardous combustion products:	Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

Advice for firefighters:

Protective actions during firefighting: Avoid breathing fire gases or vapours. Evacuate area. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal precautions: No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Avoid contact with skin, eyes and clothing. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.

Environmental precautions:

Environmental precautions: Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up:

Methods for cleaning up: Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Approach the spillage from upwind. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Reference to other sections:

Reference to other sections: For personal protection, see Section 8. For waste disposal, see Section 13.

7. HANDLING AND STORAGE

Precautions for safe handling:

Usage precautions: Wear protective clothing as described in Section 8 of this safety data sheet. Keep container tightly sealed when not in use. Avoid contact with eyes and prolonged skin contact.

Advice on general occupational hygiene: Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

Conditions for safe storage, including any incompatibilities:

Storage precautions: Keep container tightly closed in a cool place. Store in a dry place. Store in a well-ventilated place. Store away from incompatible materials (see Section 10).

Specific end use(s): The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Sodium hexametaphosphate (CAS: 10124-56-8)

DNEL: Workers - Inhalation; Long term systemic effects: 5.289 mg/m³
General population - Inhalation; Long term systemic effects: 1.304 mg/m³

PNEC: Fresh water; 0.1 mg/l
Marine water; 0.01 mg/l
Intermittent release; 1 mg/l
STP; 100 mg/l

Exposure controls:

Appropriate engineering controls: Provide adequate ventilation. Mechanical ventilation or local exhaust ventilation may be required.

Eye/face protection: Personal protective equipment that provides appropriate eye and face protection should be worn. The following protection should be worn: Wear chemical splash goggles.

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection: Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures: Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection: Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

Environmental exposure controls: Avoid releasing into the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Appearance: Clear liquid.
Colour: Colourless.
Odour: Odourless.
pH: pH (diluted solution): 7 (1% sol.)
Flash point: No data available.
Vapour pressure: No data available.
Solubility(ies): Soluble in water.

[cont...]

10. STABILITY AND REACTIVITY

Reactivity: There are no known reactivity hazards associated with this product.

Chemical stability:

Stability: Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

Possibility of hazardous reactions: No potentially hazardous reactions known.

Conditions to avoid: Avoid heat.

Incompatible materials:

Materials to avoid: Strong oxidising agents.

Hazardous decomposition products: Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Toxicological information on ingredients.

Sodium Hexametaphosphate

Toxicological effects: Not regarded as a health hazard under current legislation.

Acute toxicity – oral:

Notes (oral LD₅₀): Based on available data the classification criteria are not met. LD₅₀ >2000 mg/kg, Oral, Rat

Acute toxicity – dermal:

Notes (dermal LD₅₀): Based on available data the classification criteria are not met.

Acute toxicity – inhalation:

Notes (inhalation LC₅₀): Based on available data the classification criteria are not met.

Skin corrosion/irritation:

Animal data: Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Serious eye damage/irritation: Based on available data the classification criteria are not met.

Respiratory sensitisation:

Respiratory sensitisation: Based on available data the classification criteria are not met.

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Skin sensitisation:

Skin sensitisation: Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Genotoxicity - in vitro: Based on available data the classification criteria are not met.

Carcinogenicity:

Carcinogenicity: Based on available data the classification criteria are not met.

Reproductive toxicity:

Reproductive toxicity – fertility: Based on available data the classification criteria are not met.

Reproductive toxicity – development: Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

STOT - single exposure: Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure:

STOT - repeated exposure: Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard:

Aspiration hazard: Not relevant. Solid.

Inhalation:

Dust may irritate the respiratory system. May cause coughing and difficulties in breathing.

Ingestion:

May cause discomfort if swallowed. May cause stomach pain or vomiting. May be harmful if swallowed.

Skin contact:

May cause irritation. Prolonged contact may cause dryness of the skin.

Eye contact:

Dust may cause slight irritation.

Route of exposure:

Ingestion Inhalation Skin and/or eye contact

Target organs:

No specific target organs known.

12. ECOLOGICAL INFORMATION

Ecological information on ingredients.

Sodium hexametaphosphate

Ecotoxicity: Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Toxicity:

Ecological information on ingredients.

Sodium hexametaphosphate

Toxicity: Based on available data the classification criteria are not met.

Acute aquatic toxicity:

Acute toxicity – fish: LC₅₀, 96 hour: >100 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity – aquatic invertebrates: EC₅₀, 48 hour: >485 mg/l, Daphnia magna

Acute toxicity – aquatic plants: EC₅₀, 72 hour: >100 mg/l, Desmodesmus subspicatus

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Persistence and degradability:

Ecological information on ingredients.

Sodium hexametaphosphate

Persistence and degradability: The product contains inorganic substances which are not biodegradable.

Bioaccumulative potential:

Ecological information on ingredients.

Sodium hexametaphosphate

Bioaccumulative potential: No data available on bioaccumulation.

Mobility in soil:

Ecological information on ingredients.

Sodium hexametaphosphate

Mobility: The product is water-soluble and may spread in water systems.

Results of PBT and vPvB assessment:

Ecological information on ingredients.

Sodium hexametaphosphate

Results of PBT and vPvB assessment: This substance is not classified as PBT or vPvB according to current UK criteria.

Other adverse effects:

Ecological information on ingredients.

Sodium hexametaphosphate

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

General information:

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

Disposal methods:

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. TRANSPORT INFORMATION

General:

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

UN number:

Not applicable.

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UN proper shipping name: Not applicable.

Transport hazard class(es): No transport warning sign required.

Packing group: Not applicable.

Environmental hazards:

Environmentally hazardous substance/marine pollutant: No.

Special precautions for user: Not applicable.

Transport in bulk according to Annex II of MARPOL and the IBC Code:

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

National regulations: Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.
Control of Substances Hazardous to Health Regulations 2002 (as amended).
GB CLP Regulation.
The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 (SI 2020 No. 1577) (as amended).

Chemical safety assessment: No chemical safety assessment has been carried out.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.

IATA: International Air Transport Association.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

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CAS: Chemical Abstracts Service.

PBT: Persistent, Bioaccumulative and Toxic substance.

vPvB: Very Persistent and Very Bioaccumulative.

REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.

UN: United Nations.

IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).

LC50: Lethal Concentration to 50 % of a test population.

EC₅₀: 50% of maximal Effective Concentration.

Legal disclaimer:

The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.