SAFETY DATA SHEET
Tetrasodium Pyrophosphate

Issued: 18/11/2026
Revision No: 3

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

Product identifier:

Product Name: TETRASODIUM PYROPHOSPHATE

EC Number: 231-767-1

CAS No.: 7722-88-5

Synonyms: TETRON, TETRASODIUM PYROPHOSPHATE, TETRASODIUM DIPHOSPHATE, PURON K, SODIUM PYROPHOSPHATE, TSPP, TETRASOD PYROPHOS THS, TETRASOD PYROPHOS E450III PDR, TSPP FG PDR

Pure substance/mixture: Substance

Contains: TETRASODIUM PYROPHOSPHATE

Molecular weight: 265.9 g/mol

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

Recommended use: Industrial use
Professional use
Consumer use
Detergent
Corrosion inhibitor
Cleaning agent
Metal surface treatment
Food/Feed additive
For further information, see attached Exposure Scenario

Details of the supplier of the safety data sheet:

Company name: Nexchem Ltd
Unit 3 Barshaw Park
Leycroft Road
Leicester
LE4 1ET
Tel: 0116 2311130
24/7 Emergency Tel: 0800 246 1274
Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Acute toxicity – Oral	Category 4 – (H302)
Serious eye damage/eye irritation	Category 1 – (H318)

[cont…]

Label elements:

Contains: TETRASODIUM PYROPHOSPHATE



Signal word: Danger

Hazard statements:
H302 - Harmful if swallowed
H318 - Causes serious eye damage

Precautionary statements:
P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P330 - Rinse mouth
P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information: This product requires tactile warnings if supplied to the general public.

Other hazards: No information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances:

Chemical name	Weight-%	EC No (EU Index No)	UK REACH reg No	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
TETRASODIUM PYROPHOSPHATE 7722-88-5	100%	231-767-1	-	Acute Tox. 4 H302) Eye Dam. 1 (H318)	-	-	-

Full text of H- and EUH-phrases: See section 16

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59).

[cont…]

4. FIRST AID MEASURES

Description of first aid measures:

Inhalation: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.

Skin contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if symptoms occur.

Ingestion: Rinse mouth thoroughly with water. Do NOT induce vomiting. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed:

Symptoms:

Eyes: Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.

Ingestion: Harmful if swallowed

Indication of any immediate medical attention and special treatment needed:

Note to doctors: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable Extinguishing Media: Water spray. Dry chemical. Foam.

Large Fire: CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media: Do not scatter spilled material with high pressure water streams.

Special hazards arising from the substance or mixture:

Specific hazards arising from the chemical: When heated and in case of fire, toxic vapours/gases may be formed. The product is not flammable.

Hazardous combustion products: Carbon oxides.

Advice for firefighters:

Special protective equipment and precautions for fire-fighters:

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal precautions: Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Avoid breathing dust.

Other information: Refer to protective measures listed in Sections 7 and 8.

For emergency responders: Use personal protection recommended in Section 8.

[cont…]

Environmental precautions: Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up:

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards: Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections: See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling:

Advice on safe handling: Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Do not breathe dust.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using the product. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities:

Storage Conditions: Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s): See section 1 for more information.

Risk Management Methods (RMM): The information required is contained in this Safety Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Exposure Limits:

Chemical name	United Kingdom
TETRASODIUM PYROPHOSPHATE 7722-88-5	TWA: 5 mg/m3 STEL: 15 mg/m3

Biological occupational exposure limits: This product, as supplied, does not contain any hazardous materials with biological limits established by the region-specific regulatory bodies.

Derived No Effect Level (DNEL) – Workers: No information available

Derived No Effect Level (DNEL) - General Public: No information available.

Predicted No Effect Concentration (PNEC): No information available.

[cont…]

Exposure controls:

Engineering controls: No information available.

Personal protective equipment:

Eye/face protection: Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection: Wear suitable gloves. Gloves must conform to standard EN 374.

Skin and body protection: Wear appropriate clothing to prevent reasonably probable skin contact.

Respiratory protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using the product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Physical state: Solid

Appearance: Crystalline powder

Colour: White

Odour: Odourless

Odour threshold: No information available

Property	Values	Remarks • Method
Melting point / freezing point	990°C	No information available.
Initial boiling point and boiling range		No information available.
Flammability		The product is not flammable.
Flammability Limit in Air		Not applicable.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		Not applicable.
Autoignition temperature		Not applicable.
Decomposition temperature		No information available.
pH	9.9 - 10.8	@ 10 g/l.
pH (as aqueous solution)		No information available.
Kinematic viscosity		Not applicable.
Dynamic viscosity		No information available.
Water solubility	Soluble in water	
Solubility(ies)		No information available.
Partition coefficient	-10.45	
Vapour pressure		No information available.
Relative density	2.62	@ 21 °C.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		Not applicable.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	Not considered to be explosive	
Oxidising properties	Does not meet the criteria for classification as oxidising	
Molecular weight	265.9 g/mol	

[cont…]

10. STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability:
Stability: Stable under normal conditions.
Explosion data:
Sensitivity to mechanical impact: None.
Sensitivity to static discharge: None.

Possibility of hazardous reactions: None under normal processing.

Conditions to avoid: None known based on information supplied.

Incompatible materials: None known based on information supplied.

Hazardous decomposition products: Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:
Information on likely routes of exposure:
Product Information:
Inhalation: Inhalation of dust in high concentration may cause irritation of respiratory system.
Eye contact: Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.
Skin contact: Non-irritating during normal use.
Ingestion: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics:
Symptoms:
Acute toxicity:
Numerical measures of toxicity:
Component Information:

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
TETRASODIUM PYROPHOSPHATE	1624 mg/kg (Rat)	>2000 mg/kg (Rabbit)	1100 mg/l (Rat)

Delayed and immediate effects as well as chronic effects from short and long-term exposure:
Skin corrosion/irritation: Based on available data the classification criteria are not met.
TETRASODIUM PYROPHOSPHATE (7722-88-5):

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Non-irritating during normal use

[cont…]

Serious eye damage/eye irritation: Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.

TETRASODIUM PYROPHOSPHATE (7722-88-5):

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes serious eye damage May cause permanent damage if eye is not immediately irrigated. Causes eye burns

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

Germ cell mutagenicity: Based on available data the classification criteria are not met.

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

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

STOT - single exposure: Based on available data the classification criteria are not met.

STOT - repeated exposure: Based on available data the classification criteria are not met.

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

Other adverse effects: No information available.

12. ECOLOGICAL INFORMATION

Toxicity:

Ecotoxicity: The environmental impact of this product has not been fully investigated.

TETRASODIUM PYROPHOSPHATE (7722-88-5):

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Fish Oncorhynchus mykiss (rainbow trout)	LC50	>100 mg/L		
	Crustacea Daphnia magna	EC50	>100 mg/L		
	Algae Desmodesmus subspicatus	EC50	>100 mg/L	72 hours	
	Fish	LC50	1500 mg/L		
	Other aquatic organisms Water flea	EC50	391 mg/L		

Persistence and degradability: No information available.

Bioaccumulative potential:

Bioaccumulation: There is no data for this product.

Chemical name	Partition coefficient
TETRASODIUM PYROPHOSPHATE	-10.45

Mobility in soil: Soluble in water.

[cont…]

Results of PBT and vPvB assessment:

PBT and vPvB assessment: The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
TETRASODIUM PYROPHOSPHATE	The substance is not PBT/vPvB

Other adverse effects: No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Waste from residues/unused products: Dispose of in accordance with local regulations.

Dispose of waste in accordance with environmental legislation.

Contaminated packaging: Do not reuse empty containers.

14. TRANSPORT INFORMATION

IATA:

UN number or ID number: Not regulated
Transport hazard class(es): Not regulated
Packing group: Not regulated
Environmental hazards: No
Special precautions for user:
Special Provisions: None

IMDG:

UN number or ID number: Not regulated
Transport hazard class(es): Not regulated
Packing group: Not regulated
Environmental hazards: No
Special precautions for user:
Special Provisions: None
Maritime transport in bulk according to IMO instruments: No information available

RID:

UN number or ID number: Not regulated
UN proper shipping name: Not regulated
Transport hazard class(es): Not regulated
Packing group: Not regulated
Environmental hazards: No
Special precautions for user:
Special Provisions: None

ADR:

UN number or ID number: Not regulated
UN proper shipping name: Not regulated
Transport hazard class(es): Not regulated
Packing group: Not regulated
Environmental hazards: No
Special precautions for user:
Special Provisions: None

[cont…]

15. REGULATORY INFORMATION

Chemical safety assessment:

Chemical Safety Report: A Chemical Safety Assessment has been carried out for this substance.

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

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.