

TETRASODIUM PYROPHOSPHATE (TSPP)

2. Hazards identification (continue)

Labelling according regulation (CE) 67/548/EEG

Note:



Noxious

Risc phrases

R22 Harmful if swallowed
R41 Risk of serious damage to eyes

Safety phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37/39 Wear suitable protective clothing gloves, and eye/face protection
S46 If swallowed, seek medical advice immediately and show this container or label

Other hazards

See section 11 for more detailed information on health effects and symptoms.

3. Composition/information on ingredients

Name	CAS no EINECS no	Concentration	Labeling 67/548/EEG	Labeling 1272/2008
TETRASODIUM PYROPHOSPHATE (TSPP)	7722-88-5 231-767-1	> 99%	Xn	05;07
	R phrases (1)	22-41		
	H phrases (1)	H302-H318		

(1)_Complete text of R/H phrases: see chapter 16

4. First aid measures

Description of first aid measures

AFTER CONTACT WITH THE EYES:

Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists.

AFTER SKIN-CONTACT:

Wash immediately with lots of water (15 minutes)/shower. Soap may be used.

Take victim to a doctor if irritation persists. Wash contaminated clothing before reuse.

AFTER INHALATION OF DUST:

Remove the victim into fresh air. In case of respiratory problems: consult a doctor/medical service.

AFTER SWALLOWING:

If victim conscious and alert, give 2-3 glasses of water to drink. Do not induce vomiting.

Ingestion of large quantities: immediately to hospital. If vomiting occurs and the victim is conscious, give water to further dilute the chemical. Do not leave victim unattended.

Consult a doctor/medical service. Call Poison Information Centre (www.big.be/antigif.htm).

Material Safety Data Sheet

according 1907/2006/EC



TETRASODIUM PYROPHOSPHATE (TSPP)

4. First aid measures (continue)

Most important symptoms and effects, both acute and delayed

AFTER CONTACT WITH THE EYES

Severely irritant to eyes. Redness of the eye tissue.

AFTER INHALATION OF DUST:

Dry/sore throat. Coughing.

AFTER ABSORPTION OF HIGH QUANTITIES:

Nausea. Vomiting. Diarrhoea.

ON CONTINUOUS EXPOSURE/CONTACT:

Tingling/irritation of the skin. Dry skin. Itching. Red skin.

Skin rash/inflammation. Irritation of the eye tissue.

5. Firefighting measures

Extinguishing media

EXTINGUISHING MEDIA FOR SURROUNDING FIRES : All extinguishing media allowed.

Special hazards arising from the substance or mixture

Decomposes on exposure to temperature rise: release of toxic/corrosive/combustible gases/vapours; phosphine, phosphorus oxides, oxides of sodium. Aqueous solution reacts with (some) metals.

Advice for firefighters

In case of fire: Cool tanks/drums with water spray/remove them into safety if possible to do so without risk.

Do not move the load if exposed to heat. Wear a self-contained breathing apparatus and chemical protective clothing. Dilute toxic gases with water spray.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid raising dust. Wear protective gloves/protective clothing/eye protection.

Avoid contact with the eyes, skin and clothing. Care for sufficient ventilation.

Keep away from naked flames/heat. Dust cloud production: compressed air/oxygen apparatus.

Environmental precautions

Plug the leak, cut off the supply. Dam up the solid spill. Prevent soil and water pollution.

Prevent spreading in sewers. Knock down/dilute dust cloud with water spray.

Methods and material for containment and cleaning up

Stop dust cloud by humidifying. Take up mechanically, placing in appropriate containers for disposal.

Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

Material Safety Data Sheet

according 1907/2006/EC



TETRASODIUM PYROPHOSPHATE (TSPP)

7. Handling and storage

Precautions for safe handling

Avoid dust formation. Avoid breathing dust. Use sufficient ventilation.
Avoid contact with eyes, skin and clothing. Wear protective gloves/protective clothing/eye protection.

GENERAL OCCUPATIONAL HYGIENE:

Comply with the legal requirements.
Do not eat, drink or smoke when using this product.
Clean contaminated clothing.

Conditions for safe storage, including any incompatibilities

Store in a dry, cool and well-ventilated place. Meet the legal requirements.
SUITABLE MATERIAL: polyethylene.
MATERIAL TO AVOID: aluminium, iron.
SPECIAL REQUIREMENTS: correctly labelled. Separated from strong acids.
Keep away from heat, ignition sources and incompatible substances.
Secure fragile packagings in solid containers.

Specific end use(s)

Raw material for fertilizer blends.

8. Exposure controls/personal protection

Control parameters

	mg/m ³
Legal limit value TWA 8 h:	3 mg/m ³ (ACGIH-TLV)
Legal limit value STEL 15 min:	10 mg/m ³ (ACGIH-TLV)

OCCUPATIONAL EXPOSURE CONTROLS:

Carry operations in the open/under local exhaust/ventilation or with respiratory protection to keep airborne levels below recommended exposure levels.

RESPIRATORY PROTECTION

Dust production: dust mask with filter type P2. On heating: gas mask.

HAND PROTECTION

Gloves.

GIVE GOOD RESISTANCE: butyl rubber, PVC.

EYE PROTECTION

Safety glasses. In case of dust production: protective goggles.

SKIN PROTECTION

Protective clothing.

GENERAL OCCUPATIONAL HYGIENE:

Do not eat, drink or smoke when using this product.

ENVIRONMENTAL EXPOSURE CONTROLS

Emissions from ventilation or work process equipment should be checked to ensure they comply with legislation.
In some cases process modifications will be necessary to reduce emissions to acceptable levels.



TETRASODIUM PYROPHOSPHATE (TSPP)

9. Physical and chemical properties

Information on basic physical and chemical properties

Form:	Solid (Powder or Grains)
Colour:	White
Odour:	Odourless
Odour threshold:	-
pH value:	10.0 - 10.6 (1% w/w)
Melting point/melting range:	> 980 °C
Boiling point/boiling range:	-
Flammability	unflammable
Explosive limit:	
Vapour pressure:	< 0.001 kPa (20°C)
Relative density:	± 2.5 g/cm ³
Solubility:	Water ± 5.5 g/100ml (20°C)
Partitioning coefficient octanol/water:	Octanol / water < 1
Decomposition temperature:	> 980 °C

Other information

Bulk Density:	0.5 - 0.7 g/cm ³
---------------	-----------------------------

10. Stability and reactivity

Reactivity and Chemical stability

Stable under recommended storage and treatment circumstances (heading 7).

Possibility of hazardous reactions

Violent exothermic reaction with (some) acids.
Aqueous solution reacts with (some) metals.
Reacts violently with (strong) oxidizers.

Conditions to avoid

Unstable on exposure to moisture.

Incompatible materials

KEEP SUBSTANCE AWAY FROM: oxidizing agents, (strong) acids, (strong) bases.

Hazardous decomposition products

Decomposes on exposure to temperature rise: release of toxic/corrosive/combustible gases/vapours phosphine , phosphorus oxides , oxides of sodium.

TETRASODIUM PYROPHOSPHATE (TSPP)

11. Toxicological information

Acute toxicity:

LD50 oral rat:	4000 mg/kg (rat) ; 2980 mg/kg (mouse)
LD50 dermal rat:	-
LD50 dermal rabbit:	-
LC50 inhalation rat:	-

Relevant hazard class:

Acute oral toxicity
Serious eye damage:

Category:

4
1

ROUTES OF EXPOSURE: INGESTION, INHALATION, EYES AND SKIN

ACUTE EFFECTS/SYMPTOMS

AFTER CONTACT WITH THE EYES

Severely irritant to eyes. Redness of the eye tissue.

AFTER INHALATION OF DUST:

Dry/sore throat. Coughing.

AFTER ABSORPTION OF HIGH QUANTITIES:

Nausea. Vomiting. Diarrhoea.

ON CONTINUOUS EXPOSURE/CONTACT:

Tingling/irritation of the skin. Dry skin. Itching. Red skin.

Skin rash/inflammation. Irritation of the eye tissue.

CHRONIC EFFECTS

Not listed in teratogenicity class (EC,MAK).

Not listed in mutagenicity class (EC,MAK).

Not listed in carcinogenicity class (IARC,EC,TLV,MAK).

No cumulative effect.

12. Ecological information

Toxicity

Mild water pollutant (surface water) pH shift. May cause eutrophication. Not harmful to fishes (LC50 >1000 mg/l).

LC50 (for fish):	1500 mg/L
EC50 (for crustacea):	-
ErC50 (for algae):	-

Persistence and degradability

Not of application for inorganic material.

Bioaccumulative potential

Slightly or not bioaccumulative.

Mobility in soil

Moderately soluble in water. Substance sinks in water.

Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No 1907/2006, no PBT and vPvB assessment has been conducted; inorganic product.

Other adverse effects

Other harmful impacts are not known.

Material Safety Data Sheet

according 1907/2006/EC



TETRASODIUM PYROPHOSPHATE (TSPP)

13. Disposal considerations

Name: TETRA-SODIUM PYROPHOSPHATE
Waste code: 06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

Depending on branch of industry and production process, also other EURL codes may be applicable.

PROVISIONS RELATING TO WASTE

Hazardous waste (91/689/EEC).

DISPOSAL METHODS

Remove to an authorized waste treatment plant.

Remove according to local and rural regulations.

14. Transport information

Not dangerous for transport under UN, ADR/RID/IMG or IATA.

15. Regulatory information

Further information

Substance is not listed in Annex I of directive 67/548/EEC and Annex VI of directive (EG) nr. 1272/2008.

Consult chapter 2 for classification and labelling of the substance.

16. Other information

The complete text of the H phrases mentioned in chapter 3:

R22 Harmful if swallowed
R41 Risk of serious damage to eyes

H302 Harmful if swallowed.
H318 Causes serious eye damage.

TRAINING ADVICE:

Before using/handling the product one must read carefully present MSDS.

Version –information

Datum of mutation: 24-jan-2011

Version: 01.00

Information for the reader

To the best of our knowledge the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

End of document