

Safety Data Sheet

#37790542 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Pentasodium triphosphate	7758-29-4	Na ₅ P ₃ O ₁₀	10	14 Sep 2026

SECTION 1

Identification

1.1 Product identifier

Product name Pentasodium triphosphate

CAS number 7758-29-4

EC / EINECS number 231-838-7

Chemical formula Na₅P₃O₁₀

Molecular weight 367.86

SMILES [Na].O=P(O)(O)OP(=O)(O)OP(=O)(O)O

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

For research use, laboratory use and manufacture of chemicals. Not for human or veterinary use.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

Skin Irrit. 2; H315

Eye Irrit. 2; H319

STOT SE 3; H335

2.2 Label elements



WARNING

CODE	HAZARD STATEMENT
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

CODE	PRECAUTIONARY STATEMENT
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P302+P352	IF ON SKIN: Wash with soap and water
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing

2.3 Other hazards

Does not contain components considered to have endocrine-disrupting properties. Does not meet PBT or vPvB criteria under REACH Annex XIII.

SECTION 3

Composition / information on ingredients

3.1 Substances

Name	Pentasodium triphosphate
CAS number	7758-29-4
EC number	231-838-7
Concentration / purity	c. 100% Pentasodium triphosphate (CAS: 7758-29-4)- H315, H319, H335
Classification according to Regulation (EC) No 1272/2008	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335
Hazard statements	H315, H319, H335
Acute toxicity estimate (ATE)	No data available
Impurities / stabilising additives	None

SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. In case of persistent throat irritation or coughing: seek medical attention.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Contact a physician if discomfort continues.
Eye contact	Remove contact lenses if present. Rinse eyes with water. If eye irritation persists: get medical advice/attention.
Ingestion	Drink plenty of water. Get medical attention if any discomfort continues.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Unsuitable extinguishing media	None known

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products

5.3 Advice for firefighters

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.

6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

Absorb spillage with a suitable absorbent material.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and laundry thoroughly before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature	Ambient
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Conditions for safe storage (incompatibilities)	Hygroscopic. Store under inert gas.
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7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limits (OEL / WEL)	Not applicable
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DNEC/PNEC data	DNEC: Acute effects systemic (Dermal)- 0.375 mg/kg bw/day Chronic effects systemic (Dermal)- 0.375 mg/kg bw/day Acute effects systemic (Inhalation)- 0.661 mg/m3 Chronic effects systemic (Inhalation)- 0.661 mg/m3 PNEC: Fresh water- 0.005 mg/L Fresh water sediment- 0.19 mg/kg sediment dw Water Intermittent- 0.05 mg/L Soil (Agriculture)- 0.14 mg/kg soil dw Marine water- 0.005 mg/L
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8.2 Exposure controls

Eye / face protection	Safety glasses Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Gloves: Nitrile Rubber, 0.11mm (480 mins).
Respiratory protection	Dust mask (FFP2/FFP3) Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.
Other protection	No data available
Environmental exposure controls	No data available

SECTION 9

Physical & chemical properties

9.1 Information on basic physical and chemical properties

Appearance / physical state	Solid DERIVED FROM: LITERATURE
Colour	White DERIVED FROM: LITERATURE
Odour	Not applicable
Melting / freezing point	622 DERIVED FROM: LITERATURE
Boiling point	Not applicable
Flammability	No data available
Lower and upper explosion limit	No data available
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
pH	9.5-10.3 DERIVED FROM: LITERATURE
Acidity	Base DERIVED FROM: LITERATURE
Kinematic viscosity	No data available
Solubility	Not applicable
Partition coefficient n-octanol/water (log value)	Not applicable
Vapour pressure	Not applicable
Density (g/mL)	2.52 g/mL DERIVED FROM: LITERATURE

Relative vapour density No data available

Particle characteristics No data available

9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under the prescribed storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Avoid moisture

10.5 Incompatible materials

Strong oxidising agents. Strong acids

10.6 Hazardous decomposition products

See section 5

SECTION 11

Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (LD50 / LC50) Information on hazard classes as defined in Regulation (EC) No 1272/2008
LD50 Oral - Rat - male and female - > 2,000 mg/kg
LC50 Inhalation - Rat - male and female - 4 h - > 0.39 mg/l - dust/mist
LD50 Dermal - Rabbit - > 4,640 mg/kg
Ref: External SDS

Skin corrosion / irritation Causes skin irritation

Eye corrosion / irritation Causes serious eye irritation

Respiratory / skin sensitisation Not classified

Carcinogenicity Not classified

Mutagenicity Not classified

Reproductive toxicity Not classified

STOT (single / repeated exposure) Single exposure: May cause respiratory irritation

Aspiration hazard

Not classified

11.2 Information on other hazards

Not classified

SECTION 12

Ecological information

12.1 Toxicity

Not applicable

12.2 Persistence and degradability

Not applicable

12.3 Bioaccumulative potential

Not applicable

12.4 Mobility in soil

Not applicable

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

SECTION 14

Transport information

14.1 UN number or ID number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Special precautions for user Handle in accordance with good industrial hygiene and safety practice

Transport category *Not applicable*

Tunnel code *Not applicable*

Packing instruction (ADR) *Not applicable*

Packing instruction (IMDG) *Not applicable*

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

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

Substance-specific regulations (e.g. licences) *No data available*

REACH code Y113

ECHA notification *Not applicable*

15.2 Chemical safety assessment

Not applicable

SECTION 16

Other information

Revision notes / other information

Hazard classification and labelling according to Regulation (EC) 1272/2008
All eye/face protection should comply with EN ISO 16321-1:2022
Respiratory equipment: Reusable air-purifying respirator (APR)
Filter Type: ABEK
Standard: EN 14387
National Regulations:
-Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances
Other regulations, limitations and legal regulations:
-Directive 94/33/EC- The protection of young people at work.

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.