

## SODIUM TRIPOLYPHOSPHATE (STPP)

Version number: 1.0

---

### SECTION 1: Identification

#### 1.1 Product identifier

Identification of the substance	pentasodium triphosphate
Trade name	<b><u>SODIUM TRIPOLYPHOSPHATE (STPP)</u></b>
CAS number	7758-29-4

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

Relevant identified uses	Washing and cleaning product Water conditioner Emulsifier
--------------------------	---

#### 1.3 Details of the supplier of the safety data sheet

Valudor Products, LLC 179 Calle Magdalena Suite 100 Encinitas, California CA 92024 United States	Telephone: +1 (760) 635 8500 e-mail: info@valudor.com Website: www.valudor.com
---	--

#### 1.4 Emergency telephone number

Emergency information	800-535-5053 (Infotrac)
-----------------------	-------------------------

As above or nearest toxicological information centre.

### SECTION 2: Hazard(s) identification

#### 2.1 Classification of the substance or mixture

##### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This substance does not meet the criteria for classification.

#### 2.2 Label elements

##### Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Not required.

#### 2.3 Other hazards

##### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

# SODIUM TRIPOLYPHOSPHATE (STPP)

---

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

<b>Name of substance</b>	pentasodium triphosphate
<b>Identifiers</b>	
CAS No	7758-29-4
<b>Molecular formula</b>	Na <sub>5</sub> O <sub>10</sub> P <sub>3</sub>
<b>Molar mass</b>	367.9 g/mol
<b>Purity</b>	94%

## SECTION 4: First-aid measures

### 4.1 Description of first-aid measures

#### General notes

In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following inhalation

Provide fresh air.

#### Following skin contact

Rinse skin with water/shower.

#### Following eye contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

#### Following ingestion

Rinse mouth. Do not induce vomiting.

Get medical advice/attention if you feel unwell.

#### Notes for the doctor

None.

### 4.2 Most important symptoms and effects, both acute and delayed

These information are not available.

### 4.3 Indication of any immediate medical attention and special treatment needed

None.

# SODIUM TRIPOLYPHOSPHATE (STPP)

---

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

coordinate firefighting measures to the fire surroundings

#### Unsuitable extinguishing media

none

### 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Coordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

#### Special protective equipment for firefighters

chemical protection suit, self-contained breathing apparatus (SCBA)

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Ventilate affected area.

Control of dust.

Avoid breathing dust.

Avoid contact with skin and eyes.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

#### For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Take up mechanically.

#### Advice on how to clean up a spill

Collect spillage.

# SODIUM TRIPOLYPHOSPHATE (STPP)

---

## **Other information relating to spills and releases**

Place in appropriate containers for disposal.  
Ventilate affected area.

## **6.4 Reference to other sections**

Personal protective equipment: see section 8.  
Incompatible materials: see section 10.  
Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

#### **Measures to prevent fire as well as aerosol and dust generation**

Use local and general ventilation.

#### **Specific notes/details**

Dust deposits may accumulate on all deposition surfaces in a technical room.

#### **Handling of incompatible substances or mixtures**

Do not mix with acids.

#### **Measures to protect the environment**

Avoid release to the environment.

#### **Advice on general occupational hygiene**

Do not eat, drink and smoke in work areas.  
Remove contaminated clothing and protective equipment before entering eating areas.  
Do not breathe dust.  
Avoid contact with skin and eyes.  
Wash hands after use.  
Preventive skin protection (barrier creams/ointments) is recommended.

### **7.2 Conditions for safe storage, including any incompatibilities**

#### **Flammability hazards**

None.

#### **Incompatible substances or mixtures**

Incompatible materials: see section 10.

#### **Protect against external exposure, such as**

heat, humidity

#### **Consideration of other advice**

Keep away from food, drink and animal feedingstuffs.

#### **Ventilation requirements**

Provision of sufficient ventilation.

# SODIUM TRIPOLYPHOSPHATE (STPP)

## Specific designs for storage rooms or vessels

Keep container tightly closed and in a well-ventilated place.

Keep in a cool place.

Keep container dry.

## Packaging compatibilities

Keep only in original container.

## 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)									
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Notation	Source
US	Particulates not otherwise regulated	-	PEL (CA)	-	10	-	-	dust	Cal/OSHA PEL
US	Particulates not otherwise regulated	-	PEL (CA)	-	5	-	-	r	Cal/OSHA PEL
US	particulates not otherwise classified	-	REL	-	-	-	-	appx-D	NIOSH REL
US	particulates not otherwise classified (PNOC)	-	PEL	1,766	15	-	-	partml, i, dust	29 CFR 1910.1000
US	particulates not otherwise classified (PNOC)	-	PEL	529.5	5	-	-	partml, r, dust	29 CFR 1910.1000

#### Notation

appx-D see Appendix D - Substances with No Established RELs

dust as dust

i inhalable fraction

partml particles/ml

r respirable fraction

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

# SODIUM TRIPOLYPHOSPHATE (STPP)

## 8.2 Exposure controls

### Appropriate engineering controls

Use local and general ventilation.

### Individual protection measures (personal protective equipment)

#### Eye/face protection

Wear eye/face protection.

#### Hand protection

Protective gloves		
Material	Material thickness	Breakthrough times of the glove material
IIR: isobutene-isoprene (butyl) rubber	≥ 0,5 mm	>480 minutes (permeation: level 6)
FKM: fluoro-elastomer	≥ 0,4 mm	>480 minutes (permeation: level 6)
NBR: acrylonitrile-butadiene rubber	≥ 0,35 mm	>480 minutes (permeation: level 6)
CR: chloroprene (chlorobutadiene) rubber	≥ 0,5 mm	>480 minutes (permeation: level 6)
PVC: polyvinyl chloride	≥ 0,5 mm	>480 minutes (permeation: level 6)

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Other protection measures

Protective clothing for use against solid particulates.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Particulate filter device (EN 143).

P1 (filters at least 80 % of airborne particles, color code: White).

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

# SODIUM TRIPOLYPHOSPHATE (STPP)

---

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state** solid  
(powder)

**Color** white

**Odor** odorless

#### Other safety parameters

**pH (value)** 9.5 – 10.3

**Melting point/freezing point** 622 °C

**Boiling point or initial boiling point and boiling range** not determined

**Flash point** not applicable

**Evaporation rate** not determined

**Flammability (solid, gas)** non-combustible

#### Explosive limits

Explosion limits of dust clouds not determined

**Vapor pressure** not determined

Density not determined

Vapor density 2.55 at 21 °C (water = 1)

Relative density (EU method A.3)  
not applicable

#### Solubility(ies)

Water solubility 148 g/l at 20 °C  
(EU method A.6)

#### Partition coefficient

n-octanol/water (log KOW) not relevant  
(inorganic)

**Soil organic carbon/water (log KOC)** 2.154

Auto-ignition temperature not determined

**Decomposition temperature** not relevant

# SODIUM TRIPOLYPHOSPHATE (STPP)

---

<b>Viscosity</b>	not relevant (solid)
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none
<b>Information for relevant hazard classes according to GHS</b>	hazard classes acc. to GHS (physical hazards): not relevant
<b>9.2 Other information</b>	there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.  
See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

Protect from moisture.

### 10.5 Incompatible materials

acids

### 10.6 Hazardous decomposition products

Phosphorus oxides (P<sub>x</sub>O<sub>y</sub>).

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

If not otherwise specified the classification is based on:

Animal studies; Evidence from any other toxicity tests; Expert judgment (weight of evidence determination).

#### **Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)**

This substance does not meet the criteria for classification.

#### **Acute toxicity**

Shall not be classified as acutely toxic (oral).

Shall not be classified as acutely toxic (dermal).



# SODIUM TRIPOLYPHOSPHATE (STPP)

Exposure route	Endpoint	Value	Species	Method
oral	LD0	>2,000 mg/kg	rat	OECD Guideline 401
dermal	LD0	>4,640 mg/kg	rabbit	-

## **Skin corrosion/irritation**

Shall not be classified as corrosive/irritant to skin.

(OECD Guideline 404)

## **Serious eye damage/eye irritation**

Shall not be classified as seriously damaging to the eye or eye irritant.

(OECD Guideline 405)

## **Respiratory or skin sensitization**

### **Skin sensitization**

Shall not be classified as a skin sensitizer.

(OECD Guideline 429)

## **Respiratory sensitization**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## **Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

(OECD Guideline 475)

## **Carcinogenicity**

Shall not be classified as carcinogenic.

## **IARC Monographs**

not listed

## **National Toxicology Program (United States)**

not listed

## **OSHA Carcinogens**

Not listed.

## **Reproductive toxicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## **Specific target organ toxicity - single exposure**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

# SODIUM TRIPOLYPHOSPHATE (STPP)

## Specific target organ toxicity - repeated exposure

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Chronic toxicity			
Exposure route	Endpoint	Value	Species
oral	NOAEL	100 mg/kg bw/day	dog

## Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## 11.2 Other information

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity (acute)

Based on available data, the classification criteria are not met.

Endpoint	Exposure time	Value	Species	Method
EC50	48 h	>100 mg/l	daphnia magna	EPA OTS 797.1930
LC50	24 h	>1,850 mg/l	zebra fish (Danio rerio)	AFNOR T 90 303
ErC50	48 h	69.2 mg/l	algae (Desmodesmus subspicatus)	ISO/TC147/SC5/WG5 N84

#### Aquatic toxicity (chronic)

Based on available data, the classification criteria are not met.

Endpoint	Exposure time	Value	Species	Method
ErC50	7 d	>900 mg/l	algae (Sceletonema costatum)	AFNOR T95E - doc 50

### 12.2 Persistence and degradability

#### Biodegradation

The study does not need to be conducted because the substance is inorganic.

#### Persistence

The study does not need to be conducted because the substance is inorganic.

### 12.3 Bioaccumulative potential

No data available.

# SODIUM TRIPOLYPHOSPHATE (STPP)

---

n-octanol/water (log KOW) not relevant  
(inorganic)

## 12.4 Mobility in soil

The Organic Carbon normalised adsorption coefficient 2.154

## 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

## 12.6 Other adverse effects

Not listed.  
This information is not available.

### Remarks

None.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packages

Completely emptied packages can be recycled.  
Handle contaminated packages in the same way as the substance itself.

### Remarks

Please consider the relevant national or regional provisions.

## SECTION 14: Transport information

14.1 UN number not assigned

14.2 UN proper shipping name -

14.3 Transport hazard class(es) -

14.4 Packing group -

14.5 Environmental hazards -

14.6 Special precautions for user -

14.7 Transport in bulk according to IMO instruments -

# SODIUM TRIPOLYPHOSPHATE (STPP)

---

## 14.8 Information for each of the UN Model Regulations

### Transport of dangerous goods by road or rail (49 CFR US DOT) Additional information

Not subject to transport regulations.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

#### National regulations (United States)

**Toxic Substance Control Act (TSCA)** substance is listed

#### Superfund Amendment and Reauthorization Act (SARA TITLE III )

**The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)**

not listed

**Specific Toxic Chemical Listings (EPCRA Section 313)**

not listed

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**

**List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)**

not listed

**Clean Air Act**

not listed

**Right to Know Hazardous Substance List**

**Hazardous Substance List (NJ-RTK)**

not listed

**California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987**

not listed

**Drug precursors, Chemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, paragraphs 34 (list I) and 35 (list II)**

not listed

**Industry or sector specific available guidance(s)**

**NPCA-HMIS® III**

Hazardous Materials Identification System.  
American Coatings Association.

# SODIUM TRIPOLYPHOSPHATE (STPP)

Category	Rating	Description
Chronic	/	none
Health	0	no significant risk to health
Flammability	0	material that will not burn under typical fire conditions
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	-

## NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	0	material that will not burn under typical fire conditions
Health	0	material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material
Instability	0	material that is normally stable, even under fire conditions
Special hazard	-	-

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance by the supplier.

## SECTION 16: Other information, including date of preparation or last revision

Date of preparation: 2022-10-06

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control

# SODIUM TRIPOLYPHOSPHATE (STPP)

Abbr.	Descriptions of used abbreviations
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC	International Agency for Research on Cancer
IARC Mono-graphs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NOAEL	No Observed Adverse Effect Level
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
ppm	Parts per million
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

## Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Responsible for the safety data sheet

Chemical Regulatory Compliance Company Telephone: +1 (630) 410-1660  
 Jasper, GA e-Mail: GHS@crc-us.com  
 USA Website: www.crc-us.com

## Disclaimer

This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.