

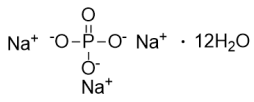
# tri-SODIUM ORTHOPHOSPHATE DODECAHYDRATE EXTRA PURE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Reference number: 05959  
Issue date: 21-12-2022 Revision date: 21-12-2022 Supersedes version of: 09-04-2015 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	: Substance
Trade name	: tri-SODIUM ORTHOPHOSPHATE DODECAHYDRATE EXTRA PURE
EC-No.	: 231-509-8
CAS-No.	: 10101-89-0
Product code	: 05959
Formula	: Na <sub>3</sub> O <sub>4</sub> P·12H <sub>2</sub> O
Chemical structure	: 
Synonyms	: Sodium phosphate tribasic dodecahydrate, Trisodium phosphate dodecahydrate

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

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

LOBA CHEMIE PVT.LTD.  
107 Wode House Road, Jehangir Villa, Colaba  
400005 Mumbai  
INDIA  
T +91 22 6663 6663 - F +91 22 6663 6699  
[info@lobachemie.com](mailto:info@lobachemie.com) - [www.lobachemie.com](http://www.lobachemie.com)

#### 1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1 H314  
Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H314 - Causes severe skin burns and eye damage.

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Precautionary statements (CLP) : P280 - Wear protective clothing, eye protection, face protection, protective gloves.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent  
Name : tri-SODIUM ORTHOPHOSPHATE DODECAHYDRATE  
CAS-No. : 10101-89-0  
EC-No. : 231-509-8

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.  
First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor.  
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.  
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects : Causes severe skin burns and eye damage.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).  
Unsuitable extinguishing media : Do not use a heavy water stream.

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

No additional information available

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

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### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Stop release.

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse.

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

Technical measures : Comply with applicable regulations.

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

No additional information available

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

No additional information available

##### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

No additional information available

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### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

**Eye protection:**

Chemical goggles or safety glasses

#### 8.2.2.2. Skin protection

**Skin and body protection:**

Wear suitable protective clothing

**Hand protection:**

protective gloves

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline powder.
Molecular mass	: 380.12 g/mol
Colour	: White crystalline.
Odour	: Odourless.
Odour threshold	: No data available
pH	: 11.8 – 12
pH solution concentration	: 1 %
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 75 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: > 75 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.62 g/cm <sup>3</sup>
Solubility	: Water: 190 g/l at 20°C - Soluble
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

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### 9.2. Other information

Bulk density : 950 kg/m<sup>3</sup> ca.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes severe skin burns. pH: 11.8 – 12
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: 11.8 – 12
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### 12.2. Persistence and degradability

No additional information available

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### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1 UN number

UN-No. (ADR) : UN 3262  
UN-No. (IMDG) : UN 3262  
UN-No. (IATA) : UN 3262  
UN-No. (ADN) : UN 3262  
UN-No. (RID) : UN 3262

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
Proper Shipping Name (IMDG) : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
Proper Shipping Name (IATA) : Corrosive solid, basic, inorganic, n.o.s.  
Proper Shipping Name (ADN) : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
Proper Shipping Name (RID) : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
Transport document description (ADR) : UN 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Tri-SODIUM ORTHOPHOSPHATE DODECAHYDRATE), 8, III, (E)  
Transport document description (IMDG) : UN 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S., 8, III  
Transport document description (IATA) : UN 3262 Corrosive solid, basic, inorganic, n.o.s., 8, III  
Transport document description (ADN) : UN 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S., 8, III  
Transport document description (RID) : UN 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S., 8, III

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 8  
Danger labels (ADR) : 8  
:



#### IMDG

Transport hazard class(es) (IMDG) : 8  
Danger labels (IMDG) : 8

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### IATA

Transport hazard class(es) (IATA) : 8  
Danger labels (IATA) : 8



### ADN

Transport hazard class(es) (ADN) : 8  
Danger labels (ADN) : 8



### RID

Transport hazard class(es) (RID) : 8  
Danger labels (RID) : 8



## 14.4. Packing group

Packing group (ADR) : III  
Packing group (IMDG) : III  
Packing group (IATA) : III  
Packing group (ADN) : III  
Packing group (RID) : III

## 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

## 14.6. Special precautions for user

### Overland transport

Classification code (ADR) : C6  
Special provisions (ADR) : 274  
Limited quantities (ADR) : 5kg  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P002, IBC08, LP02, R001  
Special packing provisions (ADR) : B3  
Mixed packing provisions (ADR) : MP10  
Portable tank and bulk container instructions (ADR) : T1  
Portable tank and bulk container special provisions (ADR) : TP33  
Tank code (ADR) : SGAV, L4BN  
Vehicle for tank carriage : AT  
Transport category (ADR) : 3  
Special provisions for carriage - Bulk (ADR) : VC1, VC2, AP7  
Hazard identification number (Kemler No.) : 80

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Orange plates : 

Tunnel restriction code (ADR) : E  
EAC code : 2X

### Transport by sea

Special provisions (IMDG) : 223, 274  
Limited quantities (IMDG) : 5 kg  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P002, LP02  
IBC packing instructions (IMDG) : IBC08  
IBC special provisions (IMDG) : B3  
Tank instructions (IMDG) : T1  
Tank special provisions (IMDG) : TP33  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B  
Stowage category (IMDG) : A  
Segregation (IMDG) : SGG18, SG35  
Properties and observations (IMDG) : Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.  
MFAG-No : 154

### Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y845  
PCA limited quantity max net quantity (IATA) : 5kg  
PCA packing instructions (IATA) : 860  
PCA max net quantity (IATA) : 25kg  
CAO packing instructions (IATA) : 864  
CAO max net quantity (IATA) : 100kg  
Special provisions (IATA) : A3  
ERG code (IATA) : 8L

### Inland waterway transport

Classification code (ADN) : C6  
Special provisions (ADN) : 274  
Limited quantities (ADN) : 5 kg  
Excepted quantities (ADN) : E1  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : C6  
Special provisions (RID) : 274  
Limited quantities (RID) : 5kg  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P002, IBC08, LP02, R001  
Special packing provisions (RID) : B3  
Mixed packing provisions (RID) : MP10  
Portable tank and bulk container instructions (RID) : T1  
Portable tank and bulk container special provisions (RID) : TP33  
Tank codes for RID tanks (RID) : SGAV, L4BN  
Transport category (RID) : 3  
Special provisions for carriage – Bulk (RID) : VC1, VC2, AP7  
Colis express (express parcels) (RID) : CE11  
Hazard identification number (RID) : 80

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable



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### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

###### REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

###### REACH Annex XIV (Authorisation List)

tri-SODIUM ORTHOPHOSPHATE DODECAHYDRATE EXTRA PURE is not on the REACH Annex XIV List

###### REACH Candidate List (SVHC)

tri-SODIUM ORTHOPHOSPHATE DODECAHYDRATE EXTRA PURE is not on the REACH Candidate List

###### PIC Regulation (Prior Informed Consent)

tri-SODIUM ORTHOPHOSPHATE DODECAHYDRATE EXTRA PURE is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

###### POP Regulation (Persistent Organic Pollutants)

tri-SODIUM ORTHOPHOSPHATE DODECAHYDRATE EXTRA PURE is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

###### Ozone Regulation (1005/2009)

tri-SODIUM ORTHOPHOSPHATE DODECAHYDRATE is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

###### Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

###### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

##### 15.1.2. National regulations

###### Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 172).  
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

###### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed  
SZW-lijst van mutagene stoffen : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

###### Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

#### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

#### Full text of H- and EUH-statements:

H314	Causes severe skin burns and eye damage.
Skin Corr. 1	Skin corrosion/irritation, Category 1

Safety Data Sheet (SDS), EU

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.