

# Rostabil TDP

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 04/11/2022

Version: 1.0



### SECTION 1: Identification

#### 1.1. Identification

Product form	: Substance
Trade name	: Rostabil TDP
Chemical name	: Triisodecyl phosphite
CAS-No.	: 25448-25-3
Other means of identification	: Phosphorus acid triisodecyl ester

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

Use of the substance/mixture	: Stabilisers Polymer preparations and compounds
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#### 1.3. Details of the supplier of the safety data sheet

PCC Chemax, Inc.  
30 Old Augusta Road  
Piedmont, SC 29673 - USA  
T 1-864-277-7000  
[cpatterson@pcc-chemax.com](mailto:cpatterson@pcc-chemax.com) - [www.pcc-chemax.com](http://www.pcc-chemax.com)

#### 1.4. Emergency telephone number

Emergency number	: 1-800-424-9300 (CHEMTREC) +1-703-527-3887 Outside the United States
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### SECTION 2: Hazard(s) identification

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

##### GHS US classification

Skin sensitization, Category 1 H317  
Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS US labeling

Hazard pictograms (GHS US)



GHS07

Signal word (GHS US)	: Warning
Hazard statements (GHS US)	: H317 - May cause an allergic skin reaction
Precautionary statements (GHS US)	: P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. P272 - Contaminated work clothing must not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 - If on skin: Wash with plenty of water. P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P363 - Wash contaminated clothing before reuse. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Name	: Triisodecyl phosphite
CAS-No.	: 25448-25-3

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Name	Product identifier	%	GHS US classification
triisodecyl phosphite	(CAS-No.) 25448-25-3	< 100	Skin Sens. 1, H317
Phenol	(CAS-No.) 108-95-2	< 1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Muta. 2, H341 STOT RE 2, H373

Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Only qualified personnel equipped with suitable protective equipment may intervene. Mouth-to-mouth resuscitation is forbidden (possible poisoning of first-aiders).
- First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest. Give oxygen or artificial respiration if necessary. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Wash with plenty of soap and water. Thoroughly clean shoes before reuse. Wash contaminated clothing before reuse. Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Immediately flush eyes thoroughly with water for at least 15 minutes.
- First-aid measures after ingestion : Rinse mouth. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do NOT induce vomiting unless directed to do so by medical personnel. If unconscious, place in the recovery position and seek medical advice. Never give anything by mouth to an unconscious person. Maintain airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

- Symptoms/effects after inhalation : May cause an allergic skin reaction.
- Symptoms/effects after skin contact : None under normal conditions.
- Symptoms/effects after eye contact : None under normal conditions.
- Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.
- Chronic symptoms : Repeated or prolonged contact may cause sensitization of the skin (dermatitis, reddening,...).

### 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 : Carbon dioxide. Dry powder. Foam. Sand. Water spray. If there is a fire close by, use suitable extinguishing agents.
- Unsuitable extinguishing media : Do not use a heavy water stream.

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

- Explosion hazard : Closed containers may swell and rupture when exposed to extreme heat. Water spray may be used to cool containers. Avoid spraying of water directly into containers of burning material as frothing may result.
- Reactivity : The product hydrolyzes in the presence of water. Thermal decomposition may produce : Carbon oxides (CO, CO<sub>2</sub>). Phosphorus oxides.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : In case of fire and/or explosion do not breathe fumes. Spill area may be slippery.

## SECTION 6: Accidental release measures

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

- General measures : Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Wear personal protective equipment.

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### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene.

### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if product enters sewers or public waters.

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

For containment : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

Methods for cleaning up : Collect spillage. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Store away from other materials.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of contaminated materials refer to section 13 : "Disposal considerations".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Avoid contact with skin, eyes and clothing.

Precautions for safe handling : Use personal protective equipment as required. Avoid all eye and skin contact and do not breathe vapor and mist. Provide adequate ventilation to minimize dust and/or vapor concentrations. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene measures : Remove contaminated clothing and shoes. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

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

Storage conditions : Protect from moisture. Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

Incompatible materials : Strong oxidizers. Avoid contact of substance with water.

Storage area : Store, if possible, in a cool, well ventilated place away from incompatible materials.

Special rules on packaging : Handle unclean empty containers as full ones.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters and occupational exposure limits

triisodecyl phosphite (25448-25-3)		
Not applicable		
Phenol (108-95-2)		
ACGIH	ACGIH TWA (ppm)	5 ppm
OSHA	OSHA PEL TWA [1]	19 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	5 ppm
IDLH	US IDLH (ppm)	250 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
NIOSH	NIOSH REL TWA [ppm]	5 ppm
NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	60 mg/m <sup>3</sup>
NIOSH	NIOSH REL C [ppm]	15.6 ppm

### 8.2. Exposure controls

Appropriate engineering controls : Local exhaust and general ventilation must be adequate to meet exposure standards.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear suitable gloves resistant to chemical penetration.

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Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke when using this product.

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Colorless or nearly colorless liquid.
Color	: light yellow
Odor	: mild
Odor threshold	: No data available
pH	: No data available
pH solution	: 9.2 1% in IPA
Melting point	: < -20 °C
Freezing point	: < -20 °C
Boiling point	: No data available
Flash point	: 150 °C Closed cup
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable. Non flammable.
Vapor pressure	: 0 Pa @25C
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.88 – 0.0905 g/cm <sup>3</sup> @ 25C
Solubility	: insoluble in water. Soluble in acetone. Soluble in chloroform. Water: 0 g/l
Partition coefficient n-octanol/water (Log Pow)	: 12.31
Auto-ignition temperature	: > 220 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 19 – 20 mPa·s ambient temperature
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product hydrolyzes in the presence of water. Thermal decomposition may produce : Carbon oxides (CO, CO<sub>2</sub>). Phosphorus oxides.

#### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7). Not established.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

#### 10.4. Conditions to avoid

Do not allow water (or moist air) contact with this material. Stable under recommended handling and storage conditions (see section 7).

#### 10.5. Incompatible materials

Oxidizing agent. Water.

#### 10.6. Hazardous decomposition products

No additional information available

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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

triisodecyl phosphite (25448-25-3)	
LD50 oral rat	13800 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	> 12.6 mg/l 1 hour
ATE US (oral)	13800 mg/kg body weight

Phenol (108-95-2)	
LD50 oral rat	340 mg/kg
LD50 dermal rabbit	660 mg/kg
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	660 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)

Phenol (108-95-2)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Not classified (Avoid exposure, obtain special instructions before use.)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Symptoms/effects after inhalation	: May cause an allergic skin reaction.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.
Chronic symptoms	: Repeated or prolonged contact may cause sensitization of the skin (dermatitis, reddening,...).

### SECTION 12: Ecological information

#### 12.1. Toxicity

Rostabil TDP	
Ecology - water	Testing not technically possible: Substance is highly insoluble in water. The product hydrolyses quickly in the presence of water to: isodecanol and phosphorous acid.

triisodecyl phosphite (25448-25-3)	
EC50 Daphnia 1	4200 µg/l Fresh water

Phenol (108-95-2)	
LC50 fish 1	11.9 – 50.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	4.24 – 10.7 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	20.5 – 25.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	10.2 – 15.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)

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### 12.2. Persistence and degradability

Rostabil TDP	
Persistence and degradability	Not established.
triisodecyl phosphite (25448-25-3)	
Persistence and degradability	Readily biodegradable. According to literature.

### 12.3. Bioaccumulative potential

Rostabil TDP	
Partition coefficient n-octanol/water (Log Pow)	12.31
Bioaccumulative potential	Not established.
Phenol (108-95-2)	
BCF fish 1	(no significant bioaccumulation)
Partition coefficient n-octanol/water (Log Pow)	1.5

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on global warming	: Not determined
Other information	: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Sewage disposal recommendations	: This material and its container must be disposed of in a safe manner.
Product/Packaging disposal recommendations	: Dispose of contents/container to ensure all national/local regulations are observed.
Additional information	: Wear personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Clean up even minor leaks or spills if possible without unnecessary risk.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)

Not regulated for transport

### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Rostabil TDP	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Health hazard - Respiratory or skin sensitization

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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### 15.2. International regulations

#### National regulations

##### Rostabil TDP

Listed on the Canadian DSL (Domestic Substances List) inventory  
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on Australian Inventory of Industrial Chemicals (AIIC)  
Inventory of Existing Chemical Substances in China (IECSC)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on KECL/KECI (Korean Existing Chemicals Inventory)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on the NCI (National Chemicals Inventory) of Vietnam

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

##### Phenol (108-95-2)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Minnesota - Hazardous Substance List  
U.S. - Massachusetts - Right To Know List  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

## SECTION 16: Other information

Other information : None.

Full text of H-phrases:

H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H331	Toxic if inhaled
H341	Suspected of causing genetic defects
H373	May cause damage to organs through prolonged or repeated exposure

SDS US (GHS HazCom 2012) - Custom 2020-01

*This information is based on our current knowledge and it is intended to describe the product for the purposes of health, safety, and environmental requirements only. No warranty, as to the accuracy, completeness, or adequacy of the information contained herein is either expressed or implied. Users must determine individually, by testing or otherwise, the suitability of this product for their purposes, including mixing with other products. The revision of the document supersedes all those previously issued for the product.*