

## Material Safety Data Sheet

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Regulation (EC) No 1907/2006

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1 - Product and Company Information

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Product Name SODIUM TRIPHOSPHATE PENTABASIC,  
PRACTICAL GRAD  
Product Number T5883  
Company Sigma-Aldrich Pte Ltd  
#02-14 The Capricorn, Sci. Park II  
Singapore 117528  
Singapore  
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2 - Hazards Identification

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SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Irritating to eyes, respiratory system and skin.

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3 - Composition/Information on Ingredients

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Product Name	CAS #	EC no	Annex I Index Number
SODIUM TRIPHOSPHATE PENTABASIC	7758-29-4	231-838-7	None

Formula Na<sub>5</sub>P<sub>3</sub>O<sub>10</sub>  
Molecular Weight 367.86 AMU  
Synonyms Armofos \* Empiphos stp-D \* Freez-Gard FP 19 \*  
Natriumtripolyphosphat (German) \* Pentasodium  
triphosphate \* Pentasodium tripolyphosphate \*  
Polygon \* Rhodiaphos H 5 \* Rhodiaphos LV \* S 400  
(phosphate) \* Sodium phosphate (Na<sub>5</sub>P<sub>3</sub>O<sub>10</sub>) \*  
Sodium triphosphate \* Sodium triphosphate  
(Na<sub>5</sub>P<sub>3</sub>O<sub>10</sub>) \* Sodium tripolyphosphate \* STPP \*  
Thermphos \* Thermphos L 50 \* Thermphos N \*  
Thermphos SPR \* Tripoly

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4 - First Aid Measures

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## AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give  
artificial respiration. If breathing is difficult, give oxygen.

## AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious  
amounts of water.

## AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts  
of water for at least 15 minutes.

## AFTER INGESTION

If swallowed, wash out mouth with water provided person is

conscious. Call a physician.

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## 5 - Fire Fighting Measures

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### EXTINGUISHING MEDIA

Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.

### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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## 6 - Accidental Release Measures

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### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

### ENVIRONMENTAL PRECAUTION(S)

Avoid contaminating water supply. Avoid contaminating sewers and waterways with this material.

### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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## 7 - Handling and Storage

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### HANDLING

Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

### STORAGE

Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS: Hygroscopic.

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## 8 - Exposure Controls / Personal Protection

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### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

### EXPOSURE LIMITS

Country	Source	Type	Value
	OSHA.	TWA	5 mg/m3

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.



Oral  
Rat  
3120 mg/kg  
Remarks: Behavioral:Coma. Behavioral:Somnolence (general depressed activity).

LD50  
Intraperitoneal  
Rat  
525 MG/KG  
Remarks: Behavioral:Excitement. Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

LD50  
Subcutaneous  
Rat  
2060 MG/KG

LD50  
Oral  
Mouse  
3100 mg/kg  
Remarks: Behavioral:Somnolence (general depressed activity). Peripheral Nerve and Sensation:Flaccid paralysis without anesthesia (usually neuromuscular blockage). Behavioral:Convulsions or effect on seizure threshold.

LD50  
Intraperitoneal  
Mouse  
700 MG/KG  
Remarks: Kidney, Ureter, Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis).

LD50  
Subcutaneous  
Mouse  
900 MG/KG

LD50  
Intravenous  
Mouse  
71 MG/KG

LD50  
Skin  
Rabbit  
> 4640 mg/kg  
Remarks: Lungs, Thorax, or Respiration:Dyspnea. Behavioral:Somnolence (general depressed activity).

LD50  
Subcutaneous  
Guinea pig  
750 MG/KG

#### IRRITATION DATA

Skin  
Rabbit  
500 mg  
24H

Remarks: Moderate irritation effect

#### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Gastrointestinal disturbances. Exposure can cause:

#### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

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#### 12 - Ecological Information

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No data available.

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#### 13 - Disposal Considerations

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#### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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#### 14 - Transport Information

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#### RID/ADR

Non-hazardous for road transport.

#### IMDG

Non-hazardous for sea transport.

#### IATA

Non-hazardous for air transport.

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#### 15 - Regulatory Information

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#### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: Xi

Irritant.

R-PHRASES: 36/37/38

Irritating to eyes, respiratory system and skin.

S-PHRASES: 26-36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

#### COUNTRY SPECIFIC INFORMATION

#### Germany

WGK: 1

ID-Number: 1209

KBwS-Decision

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#### 16 - Other Information

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#### WARRANTY

The above information is believed to be correct but does not

purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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