

## **Zinc phosphate 7779-90-0 MSDS**

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

#### **Product identifiers**

Product name : Zinc phosphate

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. : 7779-90-0

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

Identified uses : Laboratory chemicals, Manufacture of substances

### **SECTION 2: Hazards identification**

#### **Classification of the substance or mixture**

##### **Classification according to Regulation (EC) No 1272/2008**

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

##### **Classification according to EU Directives 67/548/EEC or 1999/45/EC**

N Dangerous for the environment R50/53

For the full text of the R-phrases mentioned in this Section, see Section 16.

#### **Label elements**

##### **Labelling according Regulation (EC) No 1272/2008**

Pictogram

Signal word Warning

Hazard statement(s)

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements none

#### **Other hazards - none**

### **SECTION 3: Composition/information on ingredients**

#### **Substances**

Formula : O8P2Zn3 O8P2Zn3

Molecular Weight : 386,11 g/mol

CAS-No. : 7779-90-0

EC-No. : 231-944-3

### **Hazardous ingredients according to Regulation (EC) No 1272/2008**

Component	Classification	Concentration
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#### **Trizinc bis(orthophosphate)**

CAS-No.	7779-90-0	Aquatic Acute 1; Aquatic	<= 100 %
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EC-No.	231-944-3	Chronic 1; H410	
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Index-No.	030-011-00-6		
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### **Hazardous ingredients according to Directive 1999/45/EC**

Component	Classification	Concentration
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#### **Trizinc bis(orthophosphate)**

CAS-No.	7779-90-0	N, R50/53	<= 100 %
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EC-No.	231-944-3		
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Index-No.	030-011-00-6		
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For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

## **SECTION 4: First aid measures**

### **Description of first aid measures**

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

#### **In case of eye contact**

Flush eyes with water as a precaution.

#### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

## **SECTION 5: Firefighting measures**

### **Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Oxides of phosphorus, Zinc/zinc oxides

### **Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

no data available

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the

environment must be avoided.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage****Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

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

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

**Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**SECTION 8: Exposure controls/personal protection****Control parameters****Components with workplace control parameters****Exposure controls****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and

at the end of workday.

**Personal protective equipment****Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and

the standard EN 374 derived from it.

### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## **SECTION 9: Physical and chemical properties**

### **Information on basic physical and chemical properties**

- a) Appearance      Form: powder  
Colour: white
- b) Odour      odourless
- c) Odour Threshold      no data available
- d) pH      no data available
- e) Melting point/freezing      Melting point/range: 846 - 855 °C at ca.1.013 hPa - Decomposes on point      heating.
- f) Initial boiling point and no data available  
boiling range
- g) Flash point      not applicable
- h) Evaporation rate      no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower      no data available  
flammability or  
explosive limits
- k) Vapour pressure      no data available
- l) Vapour density      no data available
- m) Relative density      3,26 g/cm<sup>3</sup> at 22 °C
- n) Water solubility      2,7 g/l at 20 °C - OECD Test Guideline 105 - slightly soluble
- o) Partition coefficient: n- no data available  
octanol/water
- p) Auto-ignition      no data available  
temperature
- q) Decomposition      ca.50 °C -  
temperature
- r) Viscosity      no data available
- s) Explosive properties      no data available
- t) Oxidizing properties      no data available

**Other safety information**

Surface tension      70,4 mN/m at 20 °C

**SECTION 10: Stability and reactivity****Reactivity**

no data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

no data available

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

Other decomposition products - no data available

In the event of fire: see section 5

**SECTION 11: Toxicological information****Information on toxicological effects****Acute toxicity**

LD50 Oral - rat - > 5.000 mg/kg

(OECD Test Guideline 401)

LD50 Intraperitoneal - mouse - 552 mg/kg

Remarks: Lungs, Thorax, or Respiration:Other changes.

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

Eyes - rabbit

Result: No eye irritation - 72 h

(OECD Test Guideline 405)

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

IARC:      No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**Additional Information**

RTECS: TD0590000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12: Ecological information**

**Toxicity**

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0,09 mg/l - 96,0 h

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

Very toxic to aquatic life with long lasting effects.

no data available

**SECTION 13: Disposal considerations**

**Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material

with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information**

**UN number**

ADR/RID: 3077      IMDG: 3077      IATA: 3077

**UN proper shipping name**

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Trizinc bis(orthophosphate))

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Trizinc bis(orthophosphate))

IATA: Environmentally hazardous substance, solid, n.o.s. (Trizinc bis(orthophosphate))

**Transport hazard class(es)**

ADR/RID: 9      IMDG: 9      IATA: 9

**Packaging group**

ADR/RID: III      IMDG: III      IATA: III

**Environmental hazards**

ADR/RID: yes      IMDG Marine pollutant: yes      IATA: yes

**Special precautions for user****Further information**

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

**SECTION 15 - REGULATORY INFORMATION**

N/A

**SECTION 16 - ADDITIONAL INFORMATION**

N/A

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