

## N-OCTYLPHOSPHONIC ACID 4724-48-5 MSDS

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

#### Product identifiers

Product name : Octylphosphonic acid

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. : 4724-48-5

#### 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 toxicity, Oral (Category 4), H302

Skin corrosion (Category 1B), H314

Specific target organ toxicity - repeated exposure, Oral (Category 2), Kidney, Bone, H373

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

Xn Harmful R22, R48/22

C Corrosive R34

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 Danger

Hazard statement(s)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H373 May cause damage to organs (Kidney, Bone) through prolonged or repeated exposure if swallowed.

Precautionary statement(s)

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove

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

P310 Immediately call a POISON CENTER or doctor/ physician.

Supplemental Hazard none

Statements

**Other hazards - none**

### SECTION 3: Composition/information on ingredients

#### Substances

Synonyms : OPA  
Formula : C<sub>8</sub>H<sub>19</sub>O<sub>3</sub>P  
Molecular Weight : 194,21 g/mol  
CAS-No. : 4724-48-5  
EC-No. : 225-218-5

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

Component	Classification	Concentration
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##### Octylphosphonic acid

CAS-No.	4724-48-5	Acute Tox. 4; Skin Corr. 1B;	<= 100 %
EC-No.	225-218-5	STOT RE 2; H302, H314, H373	

#### Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
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##### Octylphosphonic acid

CAS-No.	4724-48-5	C, R22 - R48/22 - R34	<= 100 %
EC-No.	225-218-5		

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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### If swallowed

Do NOT induce vomiting. 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**

Carbon oxides, Oxides of phosphorus

#### **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**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas.  
Ensure

adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

### **Environmental precautions**

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

### **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**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

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**

Face shield and safety glasses 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**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

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.

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

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

- a) Appearance      Form: solid
- b) Odour      no data available
- c) Odour Threshold      no data available
- d) pH      no data available
- e) Melting point/freezing      Melting point/range: 93 - 98 °C  
point
- f) Initial boiling point and no data available  
boiling range
- g) Flash point      no data available
- 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      no data available
- n) Water solubility      no data available

- o) Partition coefficient: n- log Pow: 2,571  
octanol/water
- p) Auto-ignition      no data available  
temperature
- q) Decomposition      no data available  
temperature
- r) Viscosity      no data available
- s) Explosive properties      no data available
- t) Oxidizing properties      no data available

**Other safety information**

no data available

**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 - 1.890,0 mg/kg

**Skin corrosion/irritation**

Skin - rabbit

Result: Causes burns.

**Serious eye damage/eye irritation**

no data available

**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**

Oral - May cause damage to organs through prolonged or repeated exposure. - Kidney, Bone

**Aspiration hazard**

no data available

**Additional Information**

RTECS: Not available

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

**SECTION 12: Ecological information****Toxicity**

no data available

**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**

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: 3261    IMDG: 3261    IATA: 3261

**UN proper shipping name**

ADR/RID: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Octylphosphonic acid)

IMDG: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Octylphosphonic acid)

IATA:     Corrosive solid, acidic, organic, n.o.s. (Octylphosphonic acid)

**Transport hazard class(es)**

ADR/RID: 8      IMDG: 8      IATA: 8

**Packaging group**

ADR/RID: II      IMDG: II      IATA: II

**Environmental hazards**

ADR/RID: no      IMDG Marine pollutant: no      IATA: no

**Special precautions for user**

no data available

**SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

no data available

**Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

Acute Tox.      Acute toxicity

H302      Harmful if swallowed.

H314      Causes severe skin burns and eye damage.

H373      May cause damage to organs through prolonged or repeated exposure if swallowed.

Skin Corr.      Skin corrosion

STOT RE      Specific target organ toxicity - repeated exposure

**Full text of R-phrases referred to under sections 2 and 3**

C      Corrosive

R22      Harmful if swallowed.

R34      Causes burns.

R48/22      Harmful: danger of serious damage to health by prolonged exposure if swallowed.

**Further information**

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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. Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See

and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.