



# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : O 10129  
Product Name : Ortho phosphoric acid  
Manufacturer / supplier identification  
Company : NICE Chemicals (P) Ltd. , Cochin , India  
Tel - 0484 2800212 , 2802755  
Contact For Information : Tel . No. – 0484 2802536 Fax : 0484 2802483  
Emergency Telephone No. : 0484 2801583 Telefax No. : 0484 2802483

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS-No	:	7664-38-2	Ec-Index No.	:	015-011-00-6
EC-No.	:	231-633-2	Molecular formula:	:	H <sub>3</sub> O <sub>4</sub> P
Molar mass	:	98.00			

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3. Hazards Identification : Causes burns.

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## 4. FIRST AID MEASURES

: After inhalation : fresh air. Summon doctor.  
After skin contact: wash off with plenty of water .Remove contaminated clothing  
After eye contact: rinse out with plenty of water if pain persists consult an eye specialist  
After swallowing: make victim drink plenty of water. Avoid vomiting. Immediately summon doctor. Do not attempt to neutralize.

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5. FIRE – FIGHTING MEASURES : Suitable extinguishing media : In adaption to materials stored in the

immediate neighbourhood.

Special risks : Hydrogen may form upon contact with metals (danger of explosion). Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in the event of fire: phosphorous oxides.

Special protective equipment for fire fighting: Do not stay in dangerous zone without self contained breathing apparatus.

Other information: Non-Combustible. Contains escaping vapours with water .Prevent fire fighting water from entering surface



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water or ground water.

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## 6. ACCIDENTAL RELEASE MEASURES

Procedures for cleaning / absorption :  
Take up dry . Forward for disposal. Clean up affected area.

Person – related precautionary measures :  
Avoid generation of dusts. Do not inhale dusts. Avoid substance contact.

Environmental protection measures: Do not allow to enter sewage system.

Additional notes:  
Render harmless: neutralize with diluted sodium hydroxide solution or by throwing on lime, lime sand or sodium carbonate.

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## 7. HANDLING AND STORAGE

Handling : No further requirements.

Storage : Tightly closed Dry .In a well ventilated place.  
Below +30 °C .

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## 8. EXPOSURE CONTROLS /PERSONAL PROTECTION

Personal protective equipment

Respiratory protection : required when dusts are generated .  
Eye protection : required

Hand protection : required

Protective clothing should be selected for the working place depending on concentration and quantity of the hazardous substance handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier  
Industrial hygiene : Change contaminated clothing. Application of skin protective barrier cream recommended . Wash hands after working with substance .



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## 9. PHYSICAL AND CHEMICAL PROPERTIES :

Form : solid  
Colour : colourless  
Odour : odourless  
PH value : < 0.5  
At 100 g/l H<sub>2</sub>O (20<sup>0</sup> C )  
Melting temperature : ~42<sup>0</sup> C  
Boiling temperature : ~ 213<sup>0</sup> C  
Ignition temperature : not available  
Flash point : not available  
Explosion limits lower: not available  
Upper : not available  
Density (20<sup>0</sup> C ) : 1.87 g/cm<sup>3</sup>  
Solubility in  
water ( 20<sup>0</sup>C) : soluble

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## 10. STABILITY AND REACTIVITY

Conditions to be avoided : strong heating.

Substance to be avoided : Metals , metal alloys: formation of hydrogen.

Hazardous decomposition products : in the event of fire: phosphorous oxides.

Further information: extremely hygroscopic;  
Incompatible with iron/ iron containing compounds, steel, aluminium and their compounds.

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## 11. TOXICOLOGICAL INFORMATION

Acute toxicity:  
LD<sub>50</sub> (oral, rat): 1530 mg/Kg  
LC<sub>50</sub> (inhalation, rat): >850mg/m<sup>3</sup> /1 h;  
LD<sub>50</sub> (oral, rabbit): 2740 mg/Kg;

The literature data available to us do not conform with the labelling prescribed by the EC. However the EC has dossiers which have not been published.



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## Further toxicological information

After inhalation of vapours: irritation symptoms in the respiratory tract.

After skin contact: irritant and caustic effect .

After eye contact: Burns. Risk of blindness .

After swallowing: burns, Strong pain

Systemic effects: spasms, shock.

Further data: The product should be handled with the care usual when dealing with chemicals.

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## 12. ECOLOGICAL INFORMATION

### Behaviour in environmental compartments:

Evaluation number (FRG)(Fish) : 3.1;

### Ecotoxic effects: Biologic effects:

Inorganic substance. Does not cause biological oxygen deficit.

Toxic for aquatic organisms . Caustic even in diluted form.

Harmful effect due to pH shift.

Fish toxicity: fish  $LC_0$  : < 138 mg/l;

Aquatic organisms:  $LC_{50}$ : 100-1000 mg/l/96 h ;

### Further ecologic data:

Depending on the concentration, phosphorous compounds may contribute to the eutrophication of water supplies.

Do not allow to enter waters, waste water or soil.

## 13. DISPOSAL METHOD

Product : There are no uniform EC regulations for The disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations . We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste .



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Packaging : Disposal in compliance with official Regulations .  
Handle contaminated packaging as In the same way as the  
substance itself . If not officially specified differently , non –  
contaminated packaging may be treated like household waste or  
recycled

## 14. TRANSPORT INFORMATION

Transport over land

ADR/RID and GGVS/GGVE :

GGVS/GGVE class: 8

Number and letter: 16 c

ADR/RID class : 8

Number and letter: 16c

Name of material : ORTHOPHOSPHORIC ACID

River transport AND/ADNR: Not examined

Sea transport IMDG :

IMDG class:8

UN –No.:1805

Packaging group: III

Ems : 3-07

MFAG:700

Correct technical name: ORTHOPHOSPHORIC ACID

Air transport

ICAO-TI and IATA-DGR:

ICAO/IATA class: 8

UN/ID-No.: 3260

Packaging group: III

Correct technical name: ORTHOPHOSPHORIC ACID

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## 15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : C Corrosive

R- Phrases : 34 Causes burns

S-phrases : 26-45 In case of contact with eyes, rinse immediately with  
plenty of water and seek medical advice. In case of  
accident or if you feel unwell, seek medical advice  
immediately.

Water pollution class : 1 (slightly polluting substance)

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## 16. OTHER INFORMATION

Reason for alteration

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