

# meta-PHOSPHORIC ACID AR

## Safety Data Sheet

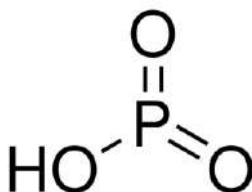
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
Trade name : meta-PHOSPHORIC ACID AR  
EC-No. : 253-433-4  
CAS-No. : 37267-86-0  
Product code : B-02011  
Type of product : Acids  
Formula : HPO<sub>3</sub>  
Chemical structure :



Synonyms : Metaphosphoric acid, Phosphenic acid

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Industrial. For professional use only.  
Use of the substance/mixture : Laboratory chemicals  
Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Bio-Chem Chemicals  
5455, Nicholson Road Science Market,  
Ambala Cantt. 133001 Haryana (India)  
+91-82952 41953  
[info@biofinechemical.com](mailto:info@biofinechemical.com) - [www.biofinechemical.com](http://www.biofinechemical.com)

#### 1.4. Emergency telephone number

Emergency number : +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

### SECTION 2: Hazards identification

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

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1 H314

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage.

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP)

: P280 - Wear protective clothing, eye protection, face protection, protective gloves.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .  
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.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0,1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type

: Multi-constituent

Name

: meta-PHOSPHORIC ACID

CAS-No.

: 37267-86-0

EC-No.

: 253-433-4

Name	Product identifier	%
SODIUM METAPHOSPHATE	CAS-No.: 10361-03-2 EC-No.: 233-782-9	50 – 60
meta-PHOSPHORIC ACID AR	CAS-No.: 37267-86-0	40 – 50

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

: Call a physician immediately.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

First-aid measures after skin contact

: Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER/doctor. Rinse skin with water/shower. Call a physician immediately.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Call a physician immediately.

First-aid measures after ingestion

: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects

: Causes severe skin burns and eye damage.

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Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

### 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	: Dry chemical, CO <sub>2</sub> , dry sand, or alcohol-resistant foam. Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

General measures	: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
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#### 6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area. Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment	: Using a clean shovel, put the material in a dry container and cover without compressing it.
Methods for cleaning up	: Mechanically recover the product. Clear up rapidly by scoop or vacuum.
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	: Ensure good ventilation of the work station. Do not breathe dust, mist. Avoid contact during pregnancy/while nursing. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures	: Comply with applicable regulations.
Storage conditions	: Keep container tightly closed. Store locked up.
Packaging materials	: Store always product in container of same material as original container.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

No additional information available

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

No additional information available

##### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

###### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### 8.2.2. Personal protection equipment

###### Personal protective equipment:

Wear recommended personal protective equipment.

###### Personal protective equipment symbol(s):



###### 8.2.2.1. Eye and face protection

###### Eye protection:

Chemical goggles or face shield

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### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear a mask

#### Hand protection:

Protective gloves

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

Wear appropriate mask

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Colour	: White.
Appearance	: White stick.
Molecular mass	: 79.98 g/mol
Odour	: Odourless.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: 200 °C
Boiling point	: 600 °C
Flammability	: Non flammable.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: 2 at 20°C (33 g/L)
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Water: Slowly soluble
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 0.04 hPa at 20 °C
Vapour pressure at 50°C	: Not available
Density	: 2 g/cm <sup>3</sup>
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Direct sunlight, Moisture.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes severe skin burns. pH: 2 at 20°C (33 g/L)

#### SODIUM METAPHOSPHATE (10361-03-2)

pH	5 – 7 at 20°C
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Serious eye damage/irritation : Assumed to cause serious eye damage  
pH: 2 at 20°C (33 g/L)

#### SODIUM METAPHOSPHATE (10361-03-2)

pH	5 – 7 at 20°C
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Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

#### meta-PHOSPHORIC ACID AR (37267-86-0)

Viscosity, kinematic	Not applicable
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#### 11.2. Information on other hazards

No additional information available

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

#### 12.2. Persistence and degradability

<b>meta-PHOSPHORIC ACID AR (37267-86-0)</b>	
Persistence and degradability	Rapidly degradable
<b>SODIUM METAPHOSPHATE (10361-03-2)</b>	
Persistence and degradability	Rapidly degradable
<b>meta-PHOSPHORIC ACID AR (37267-86-0)</b>	
Persistence and degradability	Rapidly degradable

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.  
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Sewage disposal recommendations : Disposal must be done according to official regulations.  
Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations.  
Additional information : Do not re-use empty containers.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

#### 14.1. UN number or ID number

UN-No. (ADR) : UN 3453  
UN-No. (IMDG) : UN 3453  
UN-No. (IATA) : UN 3453  
UN-No. (ADN) : UN 3453

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UN-No. (RID) : UN 3453

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : PHOSPHORIC ACID, SOLID  
Proper Shipping Name (IMDG) : PHOSPHORIC ACID, SOLID  
Proper Shipping Name (IATA) : Phosphoric acid, solid  
Proper Shipping Name (ADN) : PHOSPHORIC ACID, SOLID  
Proper Shipping Name (RID) : PHOSPHORIC ACID, SOLID  
Transport document description (ADR) : UN 3453 PHOSPHORIC ACID, SOLID, 8, III, (E)  
Transport document description (IMDG) : UN 3453 PHOSPHORIC ACID, SOLID, 8, III  
Transport document description (IATA) : UN 3453 Phosphoric acid, solid, 8, III  
Transport document description (ADN) : UN 3453 PHOSPHORIC ACID, SOLID, 8, III  
Transport document description (RID) : UN 3453 PHOSPHORIC ACID, SOLID, 8, III

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 8  
Danger labels (ADR) : 8



#### IMDG

Transport hazard class(es) (IMDG) : 8  
Danger labels (IMDG) : 8



#### IATA

Transport hazard class(es) (IATA) : 8  
Danger labels (IATA) : 8



#### ADN

Transport hazard class(es) (ADN) : 8  
Danger labels (ADN) : 8



#### RID

Transport hazard class(es) (RID) : 8  
Danger labels (RID) : 8



### 14.4. Packing group

Packing group (ADR) : III  
Packing group (IMDG) : III



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Packing group (IATA) : III  
Packing group (ADN) : III  
Packing group (RID) : III

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : C2  
Limited quantities (ADR) : 5kg  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P002, IBC08, LP02, R001  
Special packing provisions (ADR) : B3  
Mixed packing provisions (ADR) : MP10  
Portable tank and bulk container instructions (ADR) : T1  
Portable tank and bulk container special provisions (ADR) : TP33  
Tank code (ADR) : SGAV, L4BN  
Vehicle for tank carriage : AT  
Transport category (ADR) : 3  
Special provisions for carriage - Bulk (ADR) : VC1, VC2, AP7  
Hazard identification number (Kemler No.) : 80  
Orange plates :   
Tunnel restriction code (ADR) : E  
EAC code : 2X

#### Transport by sea

Limited quantities (IMDG) : 5 kg  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P002, LP02  
IBC packing instructions (IMDG) : IBC08  
IBC special provisions (IMDG) : B3  
Tank instructions (IMDG) : T1  
Tank special provisions (IMDG) : TP33  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B  
Stowage category (IMDG) : A  
Segregation (IMDG) : SGG1, SG36, SG49  
Properties and observations (IMDG) : Very deliquescent, crystalline solid. Melting point: 42°C. Soluble in water. Mildly corrosive to most metals.  
MFAG-No : 154

#### Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y845  
PCA limited quantity max net quantity (IATA) : 5kg  
PCA packing instructions (IATA) : 860  
PCA max net quantity (IATA) : 25kg  
CAO packing instructions (IATA) : 864  
CAO max net quantity (IATA) : 100kg  
Special provisions (IATA) : A803  
ERG code (IATA) : 8L

#### Inland waterway transport

Classification code (ADN) : C2  
Limited quantities (ADN) : 5 kg

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Excepted quantities (ADN) : E1  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : C2  
Limited quantities (RID) : 5kg  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P002, IBC08, LP02, R001  
Special packing provisions (RID) : B3  
Mixed packing provisions (RID) : MP10  
Portable tank and bulk container instructions (RID) : T1  
Portable tank and bulk container special provisions (RID) : TP33  
Tank codes for RID tanks (RID) : SGAV, L4BN  
Transport category (RID) : 3  
Special provisions for carriage – Bulk (RID) : VC1, VC2, AP7  
Colis express (express parcels) (RID) : CE11  
Hazard identification number (RID) : 80

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

##### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

##### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

##### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

##### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

##### Germany

Water hazard class (WGK) : Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV).  
Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

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### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed  
SZW-lijst van mutagene stoffen : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed  
SZW-lijst van reprotoxische stoffen –  
Vruchtbaarheid : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

### Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet

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<b>Abbreviations and acronyms:</b>	
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

<b>Full text of H- and EUH-statements:</b>	
H314	Causes severe skin burns and eye damage.
Skin Corr. 1	Skin corrosion/irritation, Category 1

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.