

MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL

INDUSTRY)

Product code : SA0012000500
Identification of the product : Phosphoric acid

CAS No: 7664-38-2 EC No :231-633-2 Annex No :015-011-00-6

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

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification SUVCHEM
Chaitanya Tow

Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours]

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : C; R34

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Serious eye damage - Category 1 - Danger (CLP : Eye Dam. 1) H318

Skin corrosion - Category 1B - Danger (CLP : Skin Corr. 1B) H314

2.2. Label elements

Labelling EC 67/548 or EC 1999/45



MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

2. Hazards identification -DSD (continued)

Symbol(s)

1

Symbol(s) : C : Corrosive

R Phrase(s) : R34 : Causes burns.

S Phrase(s) : S1/2 : Keep locked up and out of reach of children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice

S45: In case of accident or if you feel unwell, seek medical advice immediately (

show the label when possible).

Contains : Phosphoric acid

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words : Danger

Hazard statements : H314 : Causes severe skin burns and eye damage.

Precautionary statements

• **General** : P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

• **Prevention** : P280: Wear protective gloves, protective clothing, eye protection, face protection.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

• **Response** : P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.

 ${\tt P305+P351+P338: IF\ IN\ EYES: Rinse\ cautiously\ with\ water\ for\ several\ minutes.}$

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

P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated

clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

• Storage : P405: Store locked up.

• **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international

regulation.

Contains : Phosphoric acid

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.



MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

3. Composition/information on ingredients

Substance / Preparation : Phosphoric acid

EC No :231-633-2 Annex No :015-011-00-6

Substance.

 Substance name
 Contents
 CAS No
 EC No
 Annex No
 REACH Ref.
 Classification

 Phosphoric acid
 :
 100 %
 7664-38-2
 231-633-2
 015-011-00-6
 --- C; R34

Skin Corr. 1B _ H314

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

Inhalation : Immediately call a POISON CENTER or doctor. Remove to fresh air and keep at

rest in a position comfortable for breathing.

Skin contact : Immediately call a POISON CENTER or doctor. Wash with plenty of soap and

water. Remove/Take off immediately all contaminated clothing.

Eye contact : Immediately call a POISON CENTER or doctor. Rinse cautiously with water for

several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

Ingestion : Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. Rinse

mouth.

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

Symptoms relating to use : Causes severe skin burns and eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible).

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture



MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

5. Fire-fighting measures (continued)

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

Thermal decomposition generates: Corrosive vapours.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

6.3. Methods and material for containment and cleaning up

Clean up methods : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as

possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling

Handling : Wash contaminated clothing before reuse. Wash thoroughly after handling. Do not

breathe dust, fume, gas, mist, vapours, spray.

Technical protective measures : Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep container

closed when not in use.



MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

7. Handling and storage (continued)

Storage regulation: Comply with applicable regulations.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Specific end use(s) : None.

8. Exposure controls/personal protection

8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

Respiratory protectionHand protectionWear approved mask.Wear protective gloves.

Skin protection
 Eye protection
 Others
 Wear suitable protective clothing.
 Chemical goggles or face shield.
 When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Liquid.

Colour : Clear Colorless
Odour : Odorless

Odour threshold : No data available. pH value : No data available.

: 40 °C Melting point [°C] : N/A **Decomposition point [°C]** Critical temperature [°C] : N/A : N/A Auto-ignition temperature [°C] : N/A Flammability (solid, gas) Flash point [°C] : N/A **Boiling point [°C]** : 158 °C Initial boiling point [°C] : N/A Final boiling point [°C] : N/A



MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

9. Physical and chemical properties (continued)

Evaporation rate : N/A

Vapour pressure [20°C]: 0.03 mm Hg @ 200CVapour pressure mm/Hg: 0.03 mm Hg @ 200C

Vapour density : 3,4

Density [g/cm3] : 1,685

Relative density, gas (air=1) : N/A

Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : Completely miscible

Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.

Solubility : 1.5 Viscosity at 40°C [mm2/s] : N/A

9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A

Oxidising properties : No data available.

10. Stability and reactivity

10.1. Reactivity

Reactivity : Not established.

10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products



MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

10. Stability and reactivity (continued)

Hazardous decomposition products: Fumes. Carbon monoxide. Carbon dioxide.

Thermal decomposition generates: Corrosive vapours.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Inhalation
 Based on available data, the classification criteria are not met.
 Based on available data, the classification criteria are not met.
 Ingestion
 Based on available data, the classification criteria are not met.

Corrosion : Causes severe skin burns and eye damage.

Causes serious eye damage.

Irritation : Based on available data, the classification criteria are not met. Sensitization : Based on available data, the classification criteria are not met. Mutagenicity : Based on available data, the classification criteria are not met. : Based on available data, the classification criteria are not met. Carcinogenicity **Toxic for reproduction** : Based on available data, the classification criteria are not met. STOT-single exposure : Based on available data, the classification criteria are not met. STOT-repeated exposure : Based on available data, the classification criteria are not met. **Aspiration hazard** : Based on available data, the classification criteria are not met.

12. Ecological information

12.1. Toxicity

Toxicity information : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment



MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

12. Ecological information (continued)

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.

13. Disposal considerations

13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

14. Transport information

14.1. Land transport (ADR-RID)

Proper shipping name : PHOSPHORIC ACID, SOLUTION

UN N° : 1805 H.I. nr : 80 ADR - Class : 8

Labelling - Transport : 8 : Corrosive substance.



ADR - Classification code : C1
ADR - Group : III

ADR - Packing instructions : P001 R001 LP001

ADR - Limited Quantity : 5 L

ADR - Tunnel code : E : Passage forbidden through tunnels of category E.



14.2. Sea transport (IMDG) [English only]



MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

14. Transport information (continued)

Proper shipping name : PHOSPHORIC ACID, SOLUTION

UN N° : 1805

IMO-IMDG - Class or division : 8 : Corrosive substance.

IMO-IMDG - Packing group : |||

IMO- IMDG - Packing instructions : P001 LP01

IMO-IMDG - Limited quantities : 5 L

IMO-IMDG - Marine pollution : No

EMS-Nr : F-A S-B

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : PHOSPHORIC ACID, SOLUTION

UN N° : 1805

IATA - Class or division : 8 : Corrosive substance.

IATA - Packing group : |||

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 852

instruction

- Passenger and Cargo - Maximum : 5 L

Quantity/Packing

- Cargo only - Packing instruction : 856

- Cargo only - Maximum Quantity/ : 60 L

Packing

IATA - Limited Quantites : 1 L ERG-Nr : 8L

15. Regulatory information

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

Safety, health and environmental : Ensure all national/local regulations are observed.

regulations/legislation specific for the

substance or mixture

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions. : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.



MATERIAL SAFETY DATA SHEET (MSDS)

ORTHO-PHOSPHORIC ACID ABT.85 % AR (FOR STEEL INDUSTRY)

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

DISCLAIMER:

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

End of document