

CHAITANYA CHS, 2nd FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

MATERIAL SAFETY DATA SHEET (MSDS)

PERCHLORIC ACID ABT.70 % AR

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

1.1. Product identifier

Trade name : PERCHLORIC ACID ABT.70 % AR

Product code : SA0011202500
 CAS No: 7601-90-3

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 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 : O; R8
 R5
 C; R35

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

Health hazards : Skin corrosion - Category 1A - Danger (CLP : Skin Corr. 1A) H314
 Serious eye damage - Category 1 - Danger (CLP : Eye Dam. 1) H318
 Physical hazards : Oxidizing liquids - Category 1 - Danger (CLP : Ox. Liq. 1) H271

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s)



MATERIAL SAFETY DATA SHEET (MSDS)
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2. Hazards identification -DSD (continued)

Symbol(s)	: O : Oxidizing C : Corrosive
R Phrase(s)	: R5 : Heating may cause an explosion. R8 : Contact with combustible material may cause fire. R35 : Causes severe burns.
S Phrase(s)	: S1/2 : Keep locked up and out of reach of children. S23 : Do not breathe the gas, fumes, vapours, spray. S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36 : Wear suitable protective clothing. S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
Contains	: Perchloric acid

Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms


Signal words	: Danger
Hazard statements	: H271 : May cause fire or explosion; strong oxidizer. 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	: P210: Keep away from heat, sparks, open flames or hot surfaces. - No smoking. P280: Wear protective gloves, protective clothing, eye protection, face protection. P260: Do not breathe dust, fume, gas, mist, vapours, spray. P220: Keep away from clothing - combustible materials. P264: Wash thoroughly after handling.
• Response	: P371+P380+P375: In case of major fire and large quantities : Evacuate area. Fight fire remotely due to the risk of explosion. P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting. 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. P306+P360: IF ON CLOTHING : Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. P363: Wash contaminated clothing before reuse. P370+P378: In case of fire: Use for extinction.
• 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.

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MATERIAL SAFETY DATA SHEET (MSDS)

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2. Hazards identification -DSD (continued)

Contains : Perchloric 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.

3. Composition/information on ingredients

Substance / Preparation : Preparation.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Perchloric acid	70	7601-90-3	231-512-4	017-006-00-4	----	O; R8 R5 C; R35 ----- Ox. Liq. 1 _ H271 Skin Corr. 1A+ _ H314 Eye Dam 1 _ H318

4. First aid measures

4.1. Description of first aid measures

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

Skin contact : IF ON CLOTHING :
 Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor.

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 or doctor.

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

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5. Fire-fighting measures (continued)

- 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

- Flammable class** : May cause fire or explosion; strong oxidizer.
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. In case of major fire and large quantities : Evacuate area. Fight fire remotely due to the risk of explosion.

6. Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

- For emergency responders** : Equip cleanup crew with proper protection.
 Ventilate area.
Special precautions : No naked lights. No smoking. May cause fire or explosion; strong oxidizer.
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. Store away from other materials. Collect spillage.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage
7.1. Precautions for safe handling

MATERIAL SAFETY DATA SHEET (MSDS)
PERCHLORIC ACID ABT.70 % AR
7. Handling and storage (continued)

Handling	: Take any precaution to avoid mixing with combustibles. Do not breathe dust, fume, gas, mist, vapours, spray. Avoid contact during pregnancy or while nursing. Wash thoroughly after handling.
Technical protective measures	: Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed.

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. Keep in fireproof place.
Storage regulation	: Comply with applicable regulations.
Storage - away from	: Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources. Combustible material.

7.3. Specific end use(s)

Specific end use(s)	: None.
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8. Exposure controls/personal protection
8.1. Exposure controls

Personal protection	: Avoid all unnecessary exposure.
• Respiratory protection	: Wear approved mask.
• Hand protection	: Wear protective gloves.
• Skin protection	: Wear suitable protective clothing.
• Eye protection	: Chemical goggles or face shield.
• Others	: When using, do not eat, drink or smoke. Wear fire, flame resistant, retardant clothing.

8.2. Control parameters

Occupational Exposure Limits	: No data available.
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9. Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state at 20 °C	: Liquid.
Colour	: Colorless
Odour	: Characteristic.
Odour threshold	: No data available.
pH value	: No data available.
Melting point [°C]	: No data available.

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9. Physical and chemical properties (continued)

Decomposition point [°C]	: No data available.
Critical temperature [°C]	: No data available.
Auto-ignition temperature [°C]	: No data available.
Flammability (solid, gas)	: No data available.
Flash point [°C]	: No data available.
Initial boiling point [°C]	: No data available.
Final boiling point [°C]	: No data available.
Evaporation rate	: No data available.
Vapour pressure [20°C]	: No data available.
Vapour density	: No data available.
Density [g/cm ³]	: No data available.
Relative density, liquid (water=1)	: No data available.
Solubility in water	: No data available.
Log Pow octanol / water at 20°C	: No data available.
Viscosity at 40°C [mm ² /s]	: No data available.

9.2. Other information

Explosive properties	: No data available.
Explosion limits - upper [%]	: No data available.
Explosion limits - lower [%]	: No data available.
Oxidising properties	: May cause fire or explosion; strong oxidizer.

10. Stability and reactivity
10.1. Reactivity

Reactivity	: Not established.
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10.2. Chemical stability

Chemical stability	: Stable under recommended storage conditions.
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10.3. Possibility of hazardous reactions

Hazardous reactions	: Not established.
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10.4. Conditions to avoid

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Overheating. Open flame.
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10.5. Incompatible materials

MATERIAL SAFETY DATA SHEET (MSDS)
PERCHLORIC ACID ABT.70 % AR
10. Stability and reactivity (continued)

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.
 Thermal decomposition generates : Corrosive vapours.

11. Toxicological information
11.1. Information on toxicological effects

Toxicity information : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

Acute toxicity

- Inhalation** : Based on available data, the classification criteria are not met.
- Dermal** : 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.

Carcinogenicity

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

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 : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

MATERIAL SAFETY DATA SHEET (MSDS)
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12. Ecological information (continued)

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment
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.
 Hazardous waste due to potential risk of explosion.
 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 : PERCHLORIC ACID with more than 50% but not more than 72% acid, by mass
UN N° : 1873
H.I. nr : 558
ADR - Class : 5.1
Labelling - Transport : 5.1 : Oxidizing substances. 8 : Corrosive substance.

ADR - Classification code : OC1
ADR - Group : I
ADR - Packing instructions : P502
ADR - Limited Quantity : 0
ADR - Tunnel code : B/E : Tank carriage: Passage forbidden through tunnels of category B, C, D y E.
 Other carriage: Passage forbidden through tunnels of category E.


MATERIAL SAFETY DATA SHEET (MSDS)
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14. Transport information (continued)
14.2. Sea transport (IMDG) [English only]

Proper shipping name : PERCHLORIC ACID with more than 50% but not more than 72% acid, by mass
 UN N° : 1873
 IMO-IMDG - Class or division : 5.1 : Oxidizing substances. (8 : Corrosive substance.)
 IMO-IMDG - Packing group : I
 IMO-IMDG - Packing instructions : P502
 IMO-IMDG - Limited quantities : None
 IMO-IMDG - Marine pollution : No
 EMS-Nr : F-A S-Q

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

Proper shipping name : PERCHLORIC ACID with more than 50% but not more than 72% acid, by mass
 UN N° : 1873
 IATA - Class or division : 5.1 : Oxidizing substances. (8 : Corrosive substance.)
 IATA - Packing group : I
 IATA - Passenger and Cargo Aircraft : NOT ALLOWED
 IATA - Cargo only : ALLOWED
 - Cargo only - Packing instruction : 553
 - Cargo only - Maximum Quantity/ : 2.5 L
 Packing
 ERG-Nr : 5C

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

Safety, health and environmental regulations/legislation specific for the substance or mixture : Ensure all national/local regulations are observed.
 REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.
 REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

16. Other information

Revision : Revision - See : *
 Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.
 vPvB: very persistent and very bioaccumulative

MATERIAL SAFETY DATA SHEET (MSDS)

PERCHLORIC ACID ABT.70 % AR

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 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.

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