

# Material Safety Data Sheet



**PERCHLORIC ACID 70% AR  
SUITABLE FOR DIAMOND INDUSTRY**

**VERSION : 02  
DATE OF ISSUE : 26-08-2019  
SUPERSEDES : 01**

**Product Code : 24638**

**Page 1 of 9**

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

### **1.1. Product identifier**

**Trade name :** PERCHLORIC ACID 70% AR ( SUITABLE FOR DAIMOND INDUSTRY)

**Product code :** 24638

**Identification of the product :** PERCHLORIC ACID 70% AR

**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 :** MOLYCHEM

**Office:** 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.

**Email :** [info@molychem.net](mailto:info@molychem.net)

**Works:** Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503.

### **1.4. Emergency telephone number**

**Emergency number :** +91 22 4066 8111 (10:00am - 6:00 pm).

## **2. Hazards identification -DSD**

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

**Classification EC 67/548 or EC 1999/45**

**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) :** 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

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**Page 2 of 9**

medical advice.

S36/37/39 : Wear suitable protective clothing and gloves & eye/face protecting.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

## **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.

### **2.3. Other hazards**

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**Page 3 of 9**

**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.

<b>Substance name</b>	<b>Contents</b>	<b>CAS No</b>
<b>Perchloric acid :</b>	70%	7601-90-3
<b>Acetic acid glacial</b>	30%	64-19-7

### **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**

**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.

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**Product Code : 24638**

**Page 4 of 9**

## **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**

**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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**VERSION : 02  
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SUPERSEDES : 01**

**Product Code : 24638**

**Page 5 of 9**

## **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.

## **9. Physical and chemical properties**

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

**Physical state at 20 °C** : Liquid.

**Odour threshold** : No data available.

**pH value** : No data available.

**Melting point [°C]** : No data available.

**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<sup>3</sup>]** : 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<sup>2</sup>/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.

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**Product Code : 24638**

**Page 6 of 9**

## **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. Heat. Sparks. Overheating. Open flame.

### **10.5. Incompatible materials**

**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**

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SUPERSEDES : 01**

**Product Code : 24638**

**Page 7 of 9**

**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**

**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 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.

### **14.2. Sea transport (IMDG) [English only]**

**Proper shipping name :** PERCHLORIC ACID

**UN N° :** 1873

**IMO-IMDG - Class or division :** 5.1 : Oxidizing substances. ( 8 : Corrosive substance. )

**IMO-IMDG - Packing group :** I

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SUPERSEDES : 01**

**Product Code : 24638**

**Page 8 of 9**

**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**

**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 : 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.**

**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**

**Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.**

**vPvB: very persistent and very bioaccumulative**

**Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006**

**Further information : None.**

**In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008 DISCLAIMER OF LIABILITY The information in this SDS was**

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**Page 9 of 9**

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## **End of document**

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