

Material Safety Data Sheet



PERCHLORIC ACID 60% AR

VERSION : 03
DATE OF ISSUE : 31-01-2022
SUPERSEDES : 02

Product Code : 24635

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

1.1. Product identifier

Trade name : PERCHLORIC ACID 60% AR
Product code : 24635
Identification of the product : PERCHLORIC ACID 60% AR
CAS No : 7601-90-3

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

Identified uses : Laboratory chemicals, Manufacture of substances

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
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 according to Regulation (EC) No 1272/2008
Oxidizing liquids (Category 1), H271
Corrosive to Metals (Category 1), H290
Acute toxicity, Oral (Category 4), H302
Skin corrosion (Sub-category 1A), H314
Serious eye damage (Category 1), H318
Specific target organ toxicity - repeated exposure (Category 2), Thyroid, H373

2.2. Label elements

Labelling according Regulation (EC) No 1272/2008

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.

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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

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words : Danger

Hazard statement(s)

H271 May cause fire or explosion; strong oxidizer.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H373 May cause damage to organs (Thyroid) through prolonged or repeated exposure.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

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.

P314 Get medical advice/ attention if you feel unwell.

Supplemental Hazard Statements none

2.3. Other hazards : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. Composition/information on ingredients

3.1 Substances

Synonyms : PERCHLORIC ACID

Formula : HClO_4

Molecular weight : 100.46 g/mol


CAS-No. : 7601-90-3

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4. First aid measures

4.1. Description of first aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture

Chlorine

Hydrogen chloride gas

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Has a fire-promoting effect due to release of oxygen.

5.3. Advice for fire-fighters

Stay in danger area only with self-contained breathing apparatus.

Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact.

Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert

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For personal protection see section 8.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4. Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection.

Wash hands and face after working with substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

No metal containers. Tightly closed. Separately or together with other oxidising substances only and away from sources of ignition and heat. Because of their oxidation potential these products can raise the burning rate of combustible substances substantially or ignite combustible substances on contact with them.

Storage class

Storage class (TRGS 510): 5.1A: Strongly oxidizing hazardous materials

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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 safety glasses.
Others : When using, do not eat, drink or smoke.

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	liquid, clear
Color	Colourless
Odor	No data available
Melting point/freezing point	-18 °C
Initial boiling point and boiling range	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	Not applicable
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	3 - 5 at 50 g/l at 20 °C
Viscosity	Viscosity, kinematic : No data available Viscosity, dynamic : No data available
Water solubility	completely miscible
Partition coefficient: n-octanol/water	No data available
Vapor pressure	9,.1 hPa at 25 °C
Density	1.54 g/mL at 25 °C
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	None

9.2. Other information

No data available

10. Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Amines and alcohols cause exothermic reactions.

10.4. Conditions to avoid

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Light. Air
no information available

10.5. Incompatible materials

Strong bases, Strong acids, Amines, Phosphorus halides, Alcohols, Organic materials, Powdered metals,
Strong reducing agents Strong oxidizing agents Metals

10.6. Hazardous decomposition products

In the event of fire: see section 5

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Harmful if swallowed.
Skin corrosion/irritation	: Causes severe skin burns. pH: at 20°C (strongly acid)
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: at 20°C (strongly acid)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: No data available
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

12. Ecological information

12.1. Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

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No data available

13. Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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.

Additional information : Hazardous waste due to potential risk of explosion.

14. Transport information

14.1. UN number

ADR/RID: 1873 IMDG : 1873 IATA: 1873

14.2. UN proper shipping name

ADR/RID : PERCHLORIC ACID
IMDG: PERCHLORIC ACID
IATA: PERCHLORIC ACID

14.3. Transport hazard class(es)

ADR/RID : 5.1 (8) IMDG : 5.1 (8) IATA : 5.1 (8)

14.4. Packaging group

ADR/RID : I IMDG : I IATA : I

14.5 Environmental hazards

ADR/RID : no IMDG : Marine pollutant: no IATA :

14.6 Special precautions for user

Further information

Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2. Chemical Safety Assessment

For this product a chemical safety assessment was not 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

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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
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End of document

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