



**PERCHLORIC ACID CPECTROSOL 0.1M (0.1N)
STANDARDIZED SOLUTION
IN ACCORDANCE WITH NIST**

**MATERIAL SAFETY DATA SHEET
SDS/MSDS**

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Perchloric Acid CPECTROSOL 0.1M (0.1N) Standardized Solution
In Accordance With NIST

Product Code : 874653

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd
7/28 Vardaan House
Ansari Road Daryaganj
New Delhi -110002
INDIA

Telephone : +91 11 49404040

Email : care@cdhfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquid (Category 3), H226
Corrosive to metals (Category 1), H290
Skin irritation (Category 1A), H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Warning

Hazard statement(s)

H226

H290

H314

Flammable liquid and vapour.

May be corrosive to metals.

Causes severe skin burns and eye damage.

Precautionary statement(s)

P210	Keep away from heat.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
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.
P308 + P310	IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.
Supplemental Hazard Statements	none

2.3 Other hazards

The substance does not fulfill the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Perchloric acid			
CAS-No.	7601-90-3	Ox. Liq. 1; Eye Dam. 1; Skin	> 1 - < 5 %
EC-No.	231-512-4	Corr. 1A; H271, H314, H318	
Index No.	017-006-00-4		
Glacial Acetic acid			
CAS-No.	64-19-7	Skin Corr. 1A; Eye Dam 1;	> 99 %
EC-No.	200-580-7	Flam. Liq. 3; Acute Tox 4(inhal); H314, H318, H226, H332	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Assure fresh air breathing. Allow the victim to rest.

In case of skin contact

Wash contaminated clothing before reuse. Specific treatment (see on this label). Wash with plenty of soap and water. If skin irritation occurs: Get medical advice.

In case of eye contact

If eye irritation persists: Get medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

If swallowed

Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms relating to use: Causes serious eye irritation. Causes skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Firefighting 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

Under fire conditions, hazardous fumes will be present.

5.3 Advice for firefighters

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.

5.4 Further information

No data available

SECTION 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

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling: Wash thoroughly after handling.

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.

Storage-away from: Strong bases, strong acids, sources of ignition, direct sunlight.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If the full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: liquid Colour: Colourless
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	1.054 g/cm ³
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5 Incompatible materials

Strong acids, Strong bases.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

Causes skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

No data available

SECTION 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

The substance does not fulfill 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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information**14.1 UN number**

ADR/RID: - 2789

IMDG: - 2789

IATA: - 2789

14.2 UN proper shipping name

ADR/RID: CORROSIVE LIQUID, FLAMMABLE, N.O.S.

IMDG: CORROSIVE LIQUID, FLAMMABLE, N.O.S.

IATA: CORROSIVE LIQUID, FLAMMABLE, N.O.S.

14.3 Transport hazard class(es)

ADR/RID: - 8(3)

IMDG: - 8(3)

IATA: - 8(3)

14.4 Packaging group

ADR/RID: - II

IMDG: - II

IATA: - II

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: Yes

IATA: no

14.6 Special precautions for user

No data available

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

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

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information**Full text of H-Statements referred to under sections 2 and 3.**

H271

May cause fire or explosion; strong oxidizer.

H314

Causes severe skin burns and eye damage.

H318

Causes serious eye damage.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.