



# SAFETY DATA SHEET

ProChemOnline.com



## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Perchloric Acid**  
PRODUCT NUMBER: 14260  
CAS NUMBER: 7601-90-3  
SYNONYMS: PCA, hyperchloric acid

### MANUFACTURER:

Prochem, Inc.  
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## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

**Danger**

### Hazard Statements

H271	May cause fire or explosion; strong oxidizer.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

### Precautionary Phrases

P220	Keep/Store away from clothing/ combustible materials.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.

### HMIS CLASSIFICATION:

Health: 3      Fire: 1      Reactivity Hazard: 2      Personal: A

### NFPA RATING:

Health: 3      Flammability: 1      Reactivity Hazard: 3      Specific Hazard: OX

**EYE CONTACT:** Causes eye burns.

**SKIN CONTACT:** May be harmful if absorbed through the skin. Causes skin burns.

**INHALATION:** Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**INGESTION:** Harmful if swallowed

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	Formula	Molecular Weight
Perchloric Acid	70	7601-90-3	HClO <sub>4</sub>	100.46
Water	30	7732-18-5	H <sub>2</sub> O	18

### SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** In case of eye contact, rinse with plenty of water and seek medical attention if necessary.

**SKIN EXPOSURE:** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.

**INHALATION:** Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.

**INGESTION:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

### SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** 113°C

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Not available

**EXTINGUISHING MEDIUM:** Use appropriate media for adjacent fire. Cool containers with water.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Hydrogen chloride gas.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

### SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols. Keep away from sources of ignition - No smoking.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well ventilated area. Keep away from incompatible materials.

### SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

**EXPOSURE CONTROLS:** Contains no substances with occupational exposure limit values

**EYE PROTECTION:** Wear chemical safety glasses or goggles with face shield.

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and full body suit. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**VENTILATION:** Provide local exhaust, preferably mechanical.

**RESPIRATOR:** Use an approved respirator

**ADDITIONAL PROTECTION:** Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** Clear liquid

**ODOR:** None

**BOILING POINT:** 203°C

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES (Cont.)

**MELTING POINT:** -19°C

**SPECIFIC GRAVITY:** 1.67 gm/ml

**VAPOR DENSITY:** No data available

**SOLUBILITY:** No data available

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** Extreme heat and flames

**INCOMPATIBILITY:** Strong bases, strong acids, amines, phosphorus halides, alcohols, organic materials, powdered metals, and strong reducing agents.

**DECOMPOSITION PRODUCTS:** Hydrogen chloride gas

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** LD50 Oral – rat – 1100 mg/kg

**CARCINOGENIC EFFECTS:** No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.

**MUTAGENIC EFFECTS:** Not available

**TETRAOGENIC EFFECTS:** Not available

**CHRONIC TOXICITY:** Repeated or prolonged skin contact may cause skin sensitization, an allergic reaction and possible destruction and/or ulceration. : Prolonged or repeated inhalation may cause nosebleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pain and bronchitis. Prolonged or repeated eye contact may cause conjunctivitis. Chronic ingestion may cause effects similar to those of acute ingestion.

**RTECS:** SC7500000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

## SECTION 12 ECOLOGICAL DATA

No data available

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

## SECTION 14 TRANSPORTATION DATA

UN1873

Perchloric Acid

CLASS 5.1 (8)

PG I

Marine Pollutant: No

## SECTION 15 REGULATORY INFORMATION

**TSCA:** Listed in the TSCA inventory

**DSCL (EEC):** Listed on the DSCL inventory

**SARA 302/304:** Not Listed

## **SECTION 15 REGULATORY INFORMATION (Cont.)**

**SARA 311/312:** Perchloric Acid

**SARA (TITLE 313):** Not Listed

**CALIFORNIA PROP. 65:** Not Listed

**WHMIS CANADA:** Class C: Oxidizing material. Class E: Corrosive Liquid.

## **SECTION 16 OTHER INFORMATION**

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

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