

**Identification**

HClO<sub>4</sub>  
 M = 100,46 g/mol  
 CAS [7601-90-3]  
 EC number: 231-512-4  
 Taric code: 2811 19 80





**Applications**

analytical chemistry, laboratory reagent, oxidizing agent, in explosive compositions.

**Specifications**

assay (acidimetric).....	60 - 62 %	heavy metals (as Pb).....	max. 0,0001 %
colour (Hazen).....	max. 10	iron (Fe).....	max. 0,0001 %
insoluble in C <sub>2</sub> H <sub>5</sub> OH .....	max. 0,001 %	lead (Pb).....	max. 0,000005 %
total nitrogen (as N).....	max. 0,001 %	lithium (Li).....	max. 0,000002 %
chlorides (Cl).....	max. 0,0003 %	magnesium (Mg).....	max. 0,00005 %
chlorates (ClO <sub>3</sub> ).....	max. 0,001 %	manganese (Mn).....	max. 0,000002 %
phosphates and silicates (as SiO <sub>2</sub> ).....	max. 0,0005 %	molybdenum (Mo).....	max. 0,000005 %
sulfates (SO <sub>4</sub> ) .....	max. 0,001 %	nickel (Ni).....	max. 0,00001 %
free chlorine (as Cl).....	max. 0,00005 %	potassium (K).....	max. 0,00001 %
aluminium (Al).....	max. 0,000005 %	silver (Ag).....	max. 0,00001 %
arsenic (As).....	max. 0,000005 %	sodium (Na).....	max. 0,00005 %
barium (Ba).....	max. 0,000002 %	strontium (Sr) .....	max. 0,000002 %
beryllium (Be).....	max. 0,000002 %	thallium (Tl).....	max. 0,000005 %
bismuth (Bi).....	max. 0,00001 %	titanium (Ti).....	max. 0,00001 %
cadmium (Cd).....	max. 0,000005 %	vanadium (V).....	max. 0,000005 %
calcium (Ca).....	max. 0,00005 %	zinc (Zn).....	max. 0,00001 %
cobalt (Co).....	max. 0,000005 %	zirconium (Zr).....	max. 0,00001 %
copper (Cu).....	max. 0,00001 %	substances reducing KMnO <sub>4</sub> .....	passes test
germanium (Ge).....	max. 0,000005 %	residue on ignition (as SO <sub>4</sub> ).....	max. 0,003 %

**Packaging**
**Packaging Code**

- 1 l  AC17551000
- 1 l  AC17551001
- 2,5 l  AC17552500
- 2,5 l  AC17552501

**Physical data**

- Density: 1,53 g/cm<sup>3</sup>
- Solub. in water: (20 °C): miscible
- Boiling point: ~ 160 °C
- pH(H<sub>2</sub>O, 20 °C) < 1
- Hygroscopic

**Safety - GHS**

**Signal Word:** Danger


**Hazard Statements:**

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

**Precautionary Statements:**

- P221: Take any precaution to avoid mixing with combustibles.
- P283: Wear fire / flame resistant / retardant clothing.
- P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P405: Store locked up.
- P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

**Toxicological data**

- LD 50 (oral, rat): 1100 mg/kg (anhydrous substance)
- WGK: 1
- Poison class CH (Swiss): 1

**Transport/storage**

- ADR: 5.1 OC1 | • UN 1873 • PERCHLORIC ACID
- IMDG: 5.1 | • UN 1873 • PERCHLORIC ACID,
- IATA/ICAO: 5.1 | • UN 1873 • PERCHLORIC ACID,
- PAX: F
- CAO: 501