

Identification

HClO₄
 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).....	69 - 72 %	germanium (Ge).....	max. 0,000005 %
identity.....	passes test	heavy metals (as Pb).....	max. 0,0001 %
colour (Hazen).....	max. 10	iron (Fe).....	max. 0,0001 %
insoluble in C ₂ H ₅ OH	max. 0,001 %	lead (Pb).....	max. 0,000005 %
free chlorine (as Cl).....	max. 0,00005 %	lithium (Li).....	max. 0,000002 %
total nitrogen (as N).....	max. 0,001 %	magnesium (Mg).....	max. 0,00005 %
chlorates (ClO ₃).....	max. 0,001 %	manganese (Mn).....	max. 0,000002 %
chlorides (Cl).....	max. 0,0003 %	molybdenum (Mo).....	max. 0,000005 %
phosphates and silicates (as SiO ₂).....	max. 0,0005 %	nickel (Ni).....	max. 0,00001 %
sulfates (SO ₄)	max. 0,001 %	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 %	residue on ignition (as SO ₄).....	max. 0,003 %

Packaging
Packaging Code

1 l  AC17601000
 1 l  AC17601001
 2,5 l  AC17602500

Physical data

- Density: 1,68 g/cm³
- Solub. in water: (20 °C): miscible
- Melting point: -18 °C
- Boiling point: 198,7 °C
- pH(H₂O, 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