

Perchloric acid, solution in acetic acid 0,1 mol/l (0,1 N)

Identification

HClO₄
M = 100,46 g/mol
CAS [7601-90-3]
EC number: 231-512-4
Taric code: 2811 19 80

Applications

laboratory reagent, analytical chemistry, titrant in volumetric analysis.

Specifications

factor..... 0,995 - 1,005
uncertainty ± 0,001

1 ml = 0,01005 g HClO₄

water (K.F.)..... 0,1 - 0,2 %

This volumetric solution was checked by means of potentiometric methods using Scharlau's tris(hydroxymethyl)-aminomethane volumetric standard. Scharlau's volumetric standards are directly traceable to the Standard Reference Materials from NIST (National Institute of Standards and Technology, USA).

Physical data

- Density: 1,06 g/cm³
- Flash point: 40 °C
- Ignition temperature: ~ 485 °C
- pH(20 °C) ~ 1 -2

Safety - GHS

Signal Word: Danger

Hazard Statements:

- H314: Causes severe skin burns and eye damage.
H226: Flammable liquid and vapour.
H312: Harmful in contact with skin.

**Precautionary Statements:**

- P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
P241: Use explosion-proof electrical / ventilating / lighting / equipment.
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): 3310 mg/kg (solvent)
- MAK: 10 ml/m³, 25 mg/m³
- WGK: 1
- Poison class CH (Swiss): 3

Transport/storage

- ADR: 8 CF1 II • UN 2789 • ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION
- IMDG: 8 II • UN 2789 • ACETIC ACID, GLACIAL
- IATA/ICAO: 8 II • UN 2789 • ACETIC ACID, GLACIAL
- PAX: 809
- CAO: 813
- Store between 15°C and 25°C