

## PERCHLORIC ACID, 20%

- HClO<sub>4</sub>
- M = 100,46 g/mol
- CAS [7601-90-3]
- EINECS-No.: 231-512-4
- Density: 1,12 g/cm<sup>3</sup>
- Solub. in water: (20 °C): miscible
- Refraction index: (n 20 °C/D) 1,347
- LD 50 (oral, rat): 1100 mg/kg (anhydrous substance)
- EC-Index-No.: 017-006-00-4
- ADR: 8 CO1 II UN 1802
- IMDG: 8 II UN 1802
- IATA/ICAO: 8 II UN 1802
- GHS-signal word: Danger
- GHS-H sentences: H272 - H314
- GHS-P sentences: P221 - P210 - P303 + P361 + P353 - P305 + P351 + P338 - P405 - P501a
- Tariff number: 2811 19 80 90
- Applications: analytical chemistry, laboratory reagent, oxidizing agent, in explosive compositions.

### AC1752 Perchloric acid, solution 20% w/w, EssentQ®



assay (acidimetric) . . . . .	approx. 20 %	nitrogen compounds (as N) . . . . .	max. 0,005 %
chlorine (Cl) . . . . .	max. 0,0005 %	arsenic (As) . . . . .	max. 1 ppm
chlorates (ClO <sub>3</sub> ) . . . . .	max. 0,005 %	iron (Fe) . . . . .	max. 5 ppm
chlorides (Cl) . . . . .	max. 0,001 %	lead (Pb) . . . . .	max. 5 ppm
phosphates and silicates (as SiO <sub>2</sub> ) . . . . .	max. 0,002 %	nickel (Ni) . . . . .	max. 5 ppm
sulfates (SO <sub>4</sub> ) . . . . .	max. 0,003 %	residue on ignition (as SO <sub>2</sub> ) . . . . .	max. 0,01 %

ART. NO.	VOLUME	CONTAINER
AC17521000	1 l	0

### AC1753 Perchloric acid, solution 20% w/w, ExpertQ®, for analysis



assay (acidimetric) . . . . .	approx. 20 %	germanium (Ge) . . . . .	max. 0,05 ppm
identity . . . . .	passes test	heavy metals (as Pb) . . . . .	max. 1 ppm
colour (Hazen) . . . . .	max. 10	iron (Fe) . . . . .	max. 1 ppm
insoluble in C <sub>2</sub> H <sub>5</sub> OH . . . . .	max. 0,001 %	lead (Pb) . . . . .	max. 0,05 ppm
free chlorine (as Cl) . . . . .	max. 0,00005 %	lithium (Li) . . . . .	max. 0,02 ppm
total nitrogen (as N) . . . . .	max. 0,001 %	magnesium (Mg) . . . . .	max. 0,5 ppm
chlorates (ClO <sub>3</sub> ) . . . . .	max. 0,001 %	manganese (Mn) . . . . .	max. 0,02 ppm
chlorides (Cl) . . . . .	max. 0,0003 %	molybdenum (Mo) . . . . .	max. 0,05 ppm
phosphates and silicates (as SiO <sub>2</sub> ) . . . . .	max. 0,0005 %	nickel (Ni) . . . . .	max. 0,1 ppm
sulfates (SO <sub>4</sub> ) . . . . .	max. 0,001 %	potassium (K) . . . . .	max. 0,1 ppm
aluminium (Al) . . . . .	max. 0,05 ppm	silver (Ag) . . . . .	max. 0,1 ppm
arsenic (As) . . . . .	max. 0,05 ppm	sodium (Na) . . . . .	max. 0,5 ppm
barium (Ba) . . . . .	max. 0,02 ppm	strontium (Sr) . . . . .	max. 0,02 ppm
beryllium (Be) . . . . .	max. 0,02 ppm	thallium (Tl) . . . . .	max. 0,05 ppm
bismuth (Bi) . . . . .	max. 0,1 ppm	titanium (Ti) . . . . .	max. 0,1 ppm
cadmium (Cd) . . . . .	max. 0,05 ppm	vanadium (V) . . . . .	max. 0,05 ppm
calcium (Ca) . . . . .	max. 0,5 ppm	zinc (Zn) . . . . .	max. 0,1 ppm
cobalt (Co) . . . . .	max. 0,05 ppm	zirconium (Zr) . . . . .	max. 0,1 ppm
copper (Cu) . . . . .	max. 0,1 ppm	residue on ignition (as SO <sub>2</sub> ) . . . . .	max. 0,003 %

ART. NO.	VOLUME	CONTAINER
AC17531000	1 l	0
AC17532500	2,5 l	0

## PERCHLORIC ACID, VOLUMETRIC SOLUTIONS

### AC1765 Perchloric acid, solution in acetic acid 0,1 mol/l (0,1 N)



- HClO<sub>4</sub>
  - M = 100,46 g/mol
  - CAS [7601-90-3]
  - EINECS-No.: 231-512-4
  - Density: 1,06 g/cm<sup>3</sup>
  - Flash pt. 40 °C
  - Ignition temp.: ~ 485 °C
  - LD 50 (oral, rat): 3310 mg/kg (solvent)
  - ADR: 8 CF1 II UN 2789
  - IMDG: 8 II UN 2789
  - IATA/ICAO: 8 II UN 2789
  - GHS-signal word: Danger
  - GHS-H sentences: H314 - H226 - H312
  - GHS-P sentences: P210 - P241 - P303 + P361 + P353 - P305 + P351 + P338 - P405 - P501a
  - Tariff number: 2811 19 80 90
  - Applications: laboratory reagent, analytical chemistry, titrant in volumetric analysis.
  - factor . . . . . 0,995 - 1,005
  - uncertainty ± 0,001
  - 1 ml = 0,01005 g HClO<sub>4</sub>
  - 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).

ART. NO.	VOLUME	CONTAINER
AC17651000	1 l	0