100518  Perchloric acid 60%
for analysis EMSURE® ACS

<table>
<thead>
<tr>
<th>Product number</th>
<th>Packaging</th>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1005181001</td>
<td>Glass bottle</td>
<td>1 l</td>
<td>price on request</td>
</tr>
<tr>
<td>1005181016</td>
<td>Glass bottle</td>
<td>6 x 1 l</td>
<td>price on request</td>
</tr>
<tr>
<td>1005182501</td>
<td>Glass bottle</td>
<td>2.5 l</td>
<td>price on request</td>
</tr>
<tr>
<td>1005182514</td>
<td>Glass bottle</td>
<td>4 x 2.5 l</td>
<td>price on request</td>
</tr>
</tbody>
</table>

Prices are subject to change without notice.

Product information

Grade
ACS

HS Code
2811 19 80

Chemical and physical data

Solubility
(20 °C) soluble

Density
1.53 g/cm³ (15 °C)

pH value
(H₂O, 20 °C) strongly acid

Boiling point
160 °C

Safety information

R Phrase
R 5-8-35
Heating may cause an explosion. Contact with combustible material may cause fire. Causes severe burns.

S Phrase
S 23-26-36/37/39-45
Do not breathe vapour. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Categories of danger
oxidizing, corrosive

Hazard Symbol
Oxidising
Corrosive

Storage class
5.1A Oxidising Agents

WGK
WGK 1 slightly water endangering

Disposal
Inorganic peroxides and oxidants as well as bromine and iodine should be rendered harmless by reduction with acidic sodium thiosulfate solution (Cat. No. 106513); container D or E. Slightly soluble oxidants should be collected separately in container E or I.

Transport information

Declaration (railroad and road) UN 1873 Perchlorsäure, 5.1 (8), I
ADR, RID

Declaration (transport by sea) UN 1873 PERCHLORIC ACID, 5.1 (8), I, Segregation Group: 1 (Acids)
IMDG-Code

Declaration (transport by air) UN 1873 PERCHLORIC ACID, 5.1 (8), I
IATA-DGR

Toxicological data

LD 50 oral LD50 rat 1100 mg/kg

Specifications

Assay (acidimetric) 60.0 - 62.0 %
Colour ≤ 10 Hazen
Chlorate (ClO$_3$) ≤ 10 ppm
Chloride (Cl) ≤ 3 ppm
Free chlorine ≤ 0.5 ppm
Phosphate and Silicate (as SiO$_2$) ≤ 5 ppm
Sulphate (SO$_4$) ≤ 10 ppm
Total nitrogen (N) ≤ 10 ppm
Heavy metals (as Pb) ≤ 1 ppm
Ag (Silver) ≤ 0.1 ppm
Al (Aluminium) ≤ 0.05 ppm
As (Arsenic) ≤ 0.05 ppm
Ba (Barium) ≤ 0.02 ppm
Be (Beryllium) ≤ 0.02 ppm
Bi (Bismuth) ≤ 0.1 ppm
Ca (Calcium) ≤ 0.5 ppm
Cd (Cadmium) ≤ 0.05 ppm
Co (Cobalt) ≤ 0.05 ppm
Cu (Copper) ≤ 0.1 ppm
Fe (Iron) ≤ 1.0 ppm
Ge (Germanium) ≤ 0.05 ppm
K (Potassium) ≤ 0.1 ppm
Li (Lithium) ≤ 0.02 ppm
Mg (Magnesium) ≤ 0.5 ppm
Mn (Manganese) ≤ 0.02 ppm
<table>
<thead>
<tr>
<th>Element</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mo (Molybdenum)</td>
<td>≤ 0.05 ppm</td>
</tr>
<tr>
<td>Ni (Nickel)</td>
<td>≤ 0.1 ppm</td>
</tr>
<tr>
<td>Pb (Lead)</td>
<td>≤ 0.05 ppm</td>
</tr>
<tr>
<td>Sr (Strontium)</td>
<td>≤ 0.02 ppm</td>
</tr>
<tr>
<td>Ti (Titanium)</td>
<td>≤ 0.1 ppm</td>
</tr>
<tr>
<td>Tl (Thallium)</td>
<td>≤ 0.05 ppm</td>
</tr>
<tr>
<td>V (Vanadium)</td>
<td>≤ 0.05 ppm</td>
</tr>
<tr>
<td>Zn (Zinc)</td>
<td>≤ 0.1 ppm</td>
</tr>
<tr>
<td>Zr (Zirconium)</td>
<td>≤ 0.1 ppm</td>
</tr>
<tr>
<td>Residue on ignition (as sulphate)</td>
<td>≤ 30 ppm</td>
</tr>
</tbody>
</table>

ACS, ISO-Reag.