

Perchloric Acid 70%

1. Basic Information

Product Name	Perchloric Acid 70% AR Grade
Structural Formula	$ \begin{array}{c} \text{O} \\ \\ \text{O}=\text{Cl}=\text{O} \\ \\ \text{OH} \end{array} $
Molecular Formula	HClO ₄
CAS No.	7601-90-3
EINECS	231-512-4
Appearance	Clear, colourless liquid

2. Specifications

Characteristics	Specification
Assay as HClO ₄	70 - 72%
Residue after ignition	0.003% Max.
Chloride as Cl	3 ppm Max.
Sulphate as SO ₄	10 ppm Max.
Nitrogen compounds as N	10 ppm Max.
Heavy Metal as Pb	1 ppm Max.
Iron as Fe	1 ppm Max.
Silicate and Phosphate as SiO ₂	5 ppm Max.
Chlorate as ClO ₃	10 ppm Max.
Free Chlorine as Cl	0.5 ppm Max.
Copper as Cu	0.1 ppm Max.
Arsenic as As	0.05 ppm Max.
Lead as Pb	0.05 ppm Max.
Calcium as Ca	0.5 ppm Max.
Magnesium as Mg	0.5 ppm Max.
Aluminium as Al	0.05 ppm Max.
Potassium as K	0.1 ppm Max.
Sodium as Na	0.3 ppm Max.
Zinc as Zn	0.1 ppm Max.
Barium as Ba	0.02 ppm Max.
Beryllium as Be	0.02 ppm Max.
Silver as Ag	0.1 ppm Max.
Bismuth as Bi	0.1 ppm Max.

TECHNICAL SPECIFICATION

Cadmium as Cd	0.05 ppm Max.
Cobalt as Co	0.05 ppm Max.
Lithium as Li	0.02 ppm Max.
Manganese as Mn	0.02 ppm Max.
Molybdenum as Mo	0.05 ppm Max.
Nickel as Ni	0.1 ppm Max.
Strontium as Sr	0.02 ppm Max.
Titanium as Ti	0.1 ppm Max.
Thallium as Tl	0.05 ppm Max.
Vanadium as V	0.05 ppm Max.
Zirconium as Zr	0.1 ppm Max.
Mercury as Hg	0.1 ppm Max.
Germanium as Ge	0.05 ppm Max.
Colour	10 APHA Max.

3. Additional Information

Packing

30 kg net UN certified plastic jerry cans. 960 kg per pallet, 9.6 MT per 20' FCL

50 kg net UN certified plastic jerry cans, 1200 kg per pallet, 12 MT per 20' FCL

250/300 kg net UN certified composite steel drums. 1000/1200 kg per pallet, 10/12 MT per 20' FCL

Stability

Strong Oxidizer; may cause fire or explosion.

Stable at ambient temperature in sealed containers.

Storage & Handling

Store in closed containers away from heat and moisture.

Highly corrosive oxidizing agent.

Keep away from combustible materials.

Wear goggles and rubber gloves when handling.

Harmful if swallowed. Avoid contact with eyes, skin, clothing.

In case of spillage flush with plenty of water.

Uses

Laboratory chemical, manufacture of perchlorates, manufacture of pharma ingredients, polishing diamonds