



Laboratory chemicals and products-Clinical chemistry and hematology products-Fine & industrial chemicals

Certificate of Analysis

Product: Hydrochloric Acid 30%
Product No: 9600
Lot No:
Release Date: 04-11-13

Formula HCl

Test	Units	Specification	Actual Value
ASSAY (HCl, w/w):	%	29 - 31%	31%
Colour	Hazen	10 max	< 7

Trace Impurities	Units	Specification	Actual Value
Bromide	ppm	10 max	< 10
Total Phosphorus	ppm	0.01 max	< 0.01
Total Sulphur	ppm	0.3 max	< 0.3
Free Chlorine	ppm	0.5 max	< 0.5
Ammonium	ppm	0.5 max	< 0.5
Aluminum (Al)	ppb	1 max.	< 0.5
Antimony (Sb)	ppb	0.5 max.	< 0.1
Arsenic (As)	ppb	0.5 max.	< 0.1
Barium (Ba)	ppb	0.1 max.	< 0.1
Beryllium (Be)	ppb	0.1 max.	< 0.1
Bismuth (Bi)	ppb	0.1 max.	< 0.1
Boron (B)	ppb	1 max.	< 0.5
Cadmium (Cd)	ppb	0.1 max.	< 0.1
Calcium (Ca)	ppb	1 max.	< 0.5
Cerium (Ce)	ppb	0.1 max.	< 0.1
Cesium (Cs)	ppb	0.1 max.	< 0.1
Chromium (Cr)	ppb	0.5 max.	< 0.1
Cobalt (Co)	ppb	0.1 max.	< 0.1
Copper (Cu)	ppb	0.5 max.	< 0.1
Dysprosium (Dy)	ppb	0.1 max.	< 0.1
Erbium (Er)	ppb	0.1 max.	< 0.1
Europium (Eu)	ppb	0.1 max.	< 0.1
Gadolinium (Gd)	ppb	0.1 max.	< 0.1
Gallium (Ga)	ppb	0.1 max.	< 0.1
Germanium (Ge)	ppb	1 max.	< 0.1
Gold (Au)	ppb	0.5 max.	< 0.1
Hafnium (Hf)	ppb	0.1 max.	< 0.1
Holmium (Ho)	ppb	0.1 max.	< 0.1
Indium (In)	ppb	0.1 max.	< 0.1
Iron (Fe)	ppb	1 max.	< 0.5
Lanthanum (La)	ppb	0.1 max.	< 0.1
Lead (Pb)	ppb	0.1 max.	< 0.1

Element concentrations are at the time of lot release.

Use before: 11-2016

For Laboratory, Research or Manufacturing Use.

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Trace Impurities	Units	Specification	Actual Value
Lithium (Li)	ppb	0.1 max.	< 0.1
Lutetium (Lu)	ppb	0.1 max.	< 0.1
Magnesium (Mg)	ppb	0.5 max.	< 0.5
Manganese (Mn)	ppb	0.1 max.	< 0.1
Mercury (Hg)	ppb	0.1 max.	< 0.02
Molybdenum (Mo)	ppb	0.1 max.	< 0.1
Neodymium (Nd)	ppb	0.1 max.	< 0.1
Nickel (Ni)	ppb	0.5 max.	< 0.1
Niobium (Nb)	ppb	0.1 max.	< 0.1
Palladium (Pd)	ppb	Information Only max.	< 0.5
Platinum (Pt)	ppb	Information Only max.	< 0.5
Potassium (K)	ppb	1 max.	< 0.1
Praseodymium (Pr)	ppb	0.1 max.	< 0.1
Rhenium (Re)	ppb	0.1 max.	< 0.1
Rhodium (Rh)	ppb	0.1 max.	< 0.1
Rubidium (Rb)	ppb	0.1 max.	< 0.1
Ruthenium (Ru)	ppb	0.1 max.	< 0.1
Samarium (Sm)	ppb	0.1 max.	< 0.1
Scandium (Sc)	ppb	0.1 max.	< 0.1
Selenium (Se)	ppb	1 max.	< 0.1
Silver (Ag)	ppb	1 max.	< 0.1
Sodium (Na)	ppb	1 max.	< 0.5
Strontium (Sr)	ppb	0.1 max.	< 0.1
Tantalum (Ta)	ppb	Information Only max.	< 1
Tellurium (Te)	ppb	0.1 max.	< 0.1
Terbium (Tb)	ppb	0.1 max.	< 0.1
Thallium (Tl)	ppb	0.1 max.	< 0.1
Thorium (Th)	ppb	0.1 max.	< 0.1
Thulium (Tm)	ppb	0.1 max.	< 0.1
Tin (Sn)	ppb	0.5 max.	< 0.1
Titanium (Ti)	ppb	0.5 max.	< 0.1
Tungsten (W)	ppb	0.1 max.	< 0.1
Uranium (U)	ppb	0.1 max.	< 0.1
Vanadium (V)	ppb	0.5 max.	< 0.1
Ytterbium (Yb)	ppb	0.1 max.	< 0.1
Yttrium (Y)	ppb	0.1 max.	< 0.1
Zinc (Zn)	ppb	1 max.	< 0.5
Zirconium (Zr)	ppb	0.1 max.	< 0.1

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