



Hydrochloric Acid, 36.5-38.0%
`BAKER INSTRA-ANALYZED`[®] Reagent
(For Trace Metal Analysis)

Product No. 9530
Lot No. K24040
Release Date 06/20/2011

Certificate of Analysis

TEST	SPECIFICATION	RESULT
Meets A.C.S. Specifications		
Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.8 %
Color (APHA)	10 max.	5
Residue after Ignition	3 ppm max.	< 1 ppm
Specific Gravity at 60°/60°F	1.185 - 1.192	1.1902
Bromide (Br)	0.005 % max.	< 0.005 %
Extractable Organic Substances	5 ppm max.	< 1 ppm
Free Chlorine (as Cl ₂)	0.5 ppm max.	< 0.5 ppm
Trace Impurities (in ppm):		
Phosphate (PO ₄)	0.05 max.	0.05
Sulfate (SO ₄)	0.5 max.	< 0.3
Sulfite (SO ₃)	0.8 max.	0.4
Ammonium (NH ₄)	3 max.	< 1
Arsenic (As)	0.01 max.	< 0.01
Trace Impurities (in ppb):		
Aluminum (Al)	10 max.	0.6
Arsenic and Antimony (as As)	5 max.	< 3
Barium (Ba)	1 max.	< 0.2
Beryllium (Be)	1 max.	< 0.2
Bismuth (Bi)	10 max.	< 1
Boron (B)	20 max.	1.7
Cadmium (Cd)	1 max.	< 0.3
Calcium (Ca)	50 max.	29.9
Chromium (Cr)	1 max.	< 0.4
Cobalt (Co)	1 max.	< 0.3
Copper (Cu)	1 max.	< 0.1
Gallium (Ga)	1 max.	< 0.2
Germanium (Ge)	3 max.	< 2
Gold (Au)	4 max.	< 0.2
Heavy Metals (as Pb)	100 max.	< 50
Iron (Fe)	15 max.	0.9
Lead (Pb)	1 max.	< 0.5
Lithium (Li)	1 max.	< 0.2
Magnesium (Mg)	10 max.	0.4
Manganese (Mn)	1 max.	< 0.4
Mercury (Hg)	0.5 max.	< 0.1
Molybdenum (Mo)	10 max.	< 3
Nickel (Ni)	4 max.	0.3
Niobium (Nb)	1 max.	0.3
Potassium (K)	9 max.	< 2
Selenium (Se)	Information Only	2

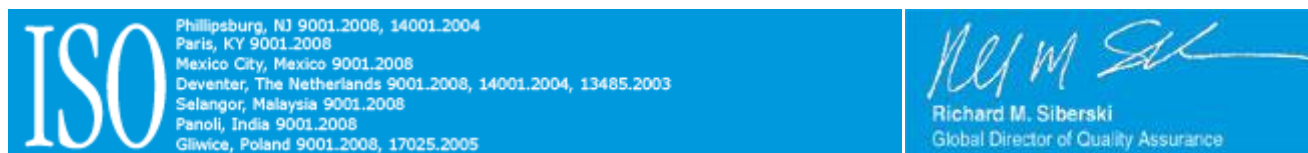
Silicon (Si)	100 max.	0.9
Silver (Ag)	1 max.	< 0.3
Sodium (Na)	100 max.	0.6
Strontium (Sr)	1 max.	< 0.2
Tantalum (Ta)	1 max.	< 0.9
Thallium (Tl)	5 max.	< 2
Tin (Sn)	5 max.	< 0.8
Titanium (Ti)	1 max.	< 0.2
Vanadium (V)	1 max.	< 0.2
Zinc (Zn)	5 max.	< 0.3
Zirconium (Zr)	1 max.	0.2

Product Information (not specifications):

Appearance (clear, fuming liquid)

For Laboratory, Research or Manufacturing Use

Country of Origin: USA



For questions on this Certificate of Analysis please contact Technical Services at 1-800-582-2537 or 908-859-2151

Avantor™ Performance Materials. Inc. (formerly Mallinckrodt Baker, Inc.)