

# Product Specification

Standard number : PG-002  
Issue number : AHG20  
Code number : 27000785

Name : Hydrochloric acid (20%)

(Other name : )  
Grade : P G  
Volume : 5 0 0 m L

3-2-12 UCHIHIRANOMACHI, CHUO-KU,  
OSAKA 540-0037, JAPAN

HAYASHI PURE CHEMICAL IND.,LTD.

No.	Item	(unit)	Specification	Test Procedure
1	Appearance (Form)	-	Liquid	Visual method
2	(Hue)	-	Colorless transparent	Visual method
3	Assay (HCl)	%	20.0 ~ 21.0	Titrimetry
4	Residue on evaporation	ppm	max. 2	Weighting method
5	Residue on ignition (sulfate)	ppm	max. 1	Weighting method
6	Bromide (Br)	ppm	max. 5	Titrimetry
7	Iodide (I)	ppm	max. 1	Titrimetry
8	Sulfate (SO <sub>4</sub> )	ppm	max. 0.1	Turbidimetry
9	Ammonium (NH <sub>4</sub> )	ppm	max. 0.5	Distillation-Indophenol blue method
10	Available chlorine	ppm	max. 0.1	Colorimetry
11	Substances reducing iodine (as SO <sub>2</sub> )	ppm	max. 0.5	Titrimetry
12	Arsenic (As)	ppb	max. 1	Silver N,N-Diethyldithio carbamate method
13	Cadmium (Cd)	ppb	max. 1	ICP-MS
14	Cobalt (Co)	ppb	max. 2	ICP-MS
15	Chromium (Cr)	ppb	max. 1	ICP-MS
16	Copper (Cu)	ppb	max. 2	ICP-MS
17	Iron (Fe)	ppb	max. 10	ICP-MS
18	Mercury (Hg)	ppb	max. 1	AAS reducing vaporization method
19	Potassium (K)	ppb	max. 50	ICP-MS
20	Manganese (Mn)	ppb	max. 2	ICP-MS
21	Sodium (Na)	ppb	max. 50	ICP-MS
22	Nickel (Ni)	ppb	max. 5	ICP-MS
23	Lead (Pb)	ppb	max. 5	ICP-MS
24	Zinc (Zn)	ppb	max. 5	ICP-MS
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