Arlington, TX 76012
Pocomoke City, MD 21851
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

## **Product Specification**

Chromium ICP Standard, 1000 ppm Cr in 3% HCl

Iridium (Ir)

Lanthanum (La)

Iron (Fe)

N/A

N/A

N/A

Lot Number: SAMPLE Product Number: PCR1KH

Manufacture Date: N/A Expiration Date: N/A

This is a single element solution that was prepared volumetrically to contain the certified value reported. The uncertainty associated with the certified value is the sum of the estimated errors due to the purity of the raw material, the volumetric preparation of the solution, and transpiration of the solution through the container wall.

The final solution concentration is confirmed by AA, ICP, or ICP-MS, and is traceable to NIST Standard Reference Material 3112. All trace level elements were determined by ICP or ICP-MS.

Name		CAS#		Grade	
Water		7732-18	3-5		
Hydrochloric Acid		7647-01	<b>-</b> 0		
Chromium			7440-47-3		
		1110 11			
Test		Speci	fication	$\mathbf{Result}$	NIST SRM#
Appearance		Blue	Blue-green liquid		
Chromium (Cr)		995-1	995-1005 ppm		3112
		Trace Elements by	ICP or ICP - M	IS I=Spectral	Interference N=Not Tested
		All values reporte	ed in mg/L (ppm)		
Aluminum (Al)	N/A	Lead (Pb)	N/A	Strontium (Sr)	N/A
Antimony (Sb)	N/A	Lithium (Li)	N/A	Sulfur (S)	N/A
Arsenic (As)	N/A	Lutetium (Lu)	N/A	Tantalum (Ta)	N/A
Barium (Ba)	N/A	Magnesium (Mg)	N/A	Tellurium (Te)	N/A
Beryllium (Be)	N/A	Manganese (Mn)	N/A	Terbium (Tb)	N/A
Bismuth (Bi)	N/A	Mercury (Hg)	N/A	Thallium (Tl)	N/A
Boron (B)	N/A	Molybdenum (Mo)	N/A	Thorium (Th)	N/A
Cadmium (Cd)	N/A	Neodymium (Nd)	N/A	Thulium (Tm)	N/A
Calcium (Ca)	N/A	Nickel (Ni)	N/A	Tin (Sn)	N/A
Cerium (Ce)	N/A	Niobium (Nb)	N/A	Titanium (Ti)	N/A
Cesium (Cs)	N/A	Osmium (Os)	N/A	Tungsten (W)	N/A
Cobalt (Co)	N/A	Palladium (Pd)	N/A	Uranium (U)	N/A
Copper (Cu)	N/A	Phosphorus (P)	N/A	Vanadium (V)	N/A
Dysprosium (Dy)	N/A	Platinum (Pt)	N/A	Ytterbium (Yb)	N/A
Erbium (Er)	N/A	Potassium (K)	N/A	Yttrium (Y)	N/A
Europium (Eu)	N/A	Praseodymium (Pr)	N/A	Zinc (Zn)	N/A
Gadolinium (Gd)	N/A	Rhenium (Re)	N/A	Zirconium (Zr)	N/A
Gallium (Ga)	N/A	Rhodium (Rh)	N/A		
Germanium (Ge)	N/A	Rubidium (Rb)	N/A		
Gold (Au)	N/A	Ruthenium (Ru)	N/A		
Hafnium (Hf)	N/A	Samarium (Sm)	N/A		
Holmium (Ho)	N/A	Scandium (Sc)	N/A		
Indium (In)	N/A	Selenium (Se)	N/A		
(_ \					

Version: 1.3 Lot Number: SAMPLE Product Number: PCR1KH Page 1 of 2

N/A

N/A

N/A

Silicon (Si)

Silver (Ag)

Sodium (Na)

Specification	Reference

Chromium ICP, 1,000 ppm in 3% HCl EPA (200.7)

This standard is guaranteed to be stable and accurate provided the product is kept tightly capped and stored under normal laboratory conditions. Balances are calibrated using NIST traceable weights whose verification of maintenance and recalibration is documented per in-house Standard Operating Procedures. Class A glassware is also calibrated and routinely rechecked per in-house Standard Operating Procedures. Trace metal analyzed acids and Trace Metals Analyzed Water are used in the manufacture of this product. Triple cleaned containers are used in the manufacture of this product.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
PCR1KH-500	500 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

This document is designed to comply with ISO Guide 31 "Reference Materials  $^{\rm --}$  Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Version: 1.3 Lot Number: SAMPLE Product Number: PCR1KH Page 2 of 2