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

## **Product Specification**

Cadmium ICP-MS Standard, 10,000 ppm Cd in 5% HNO<sub>3</sub>

Lot Number: SAMPLE Product Number: MSCD10KN

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 3108. All trace level elements were determined by ICP or ICP-MS.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Nitric Acid	7697-37-2	Trace Metals
Cadmium	7440-43-9	High Purity

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	N/A	
Assay (vs. EDTA/Xylenol Orange)	9970-10030 ppm Cd	N/A	915

	Turiyiciidi orange	Trace Elements by		I=Spectral l	Interference N=Not Tested
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 N/A	Mercury (Hg)	N/A N/A	Thallium (Tl)	N/A N/A
Boron (B)	N/A	Molybdenum (Mo)	N/A N/A	Thorium (Th)	N/A
Calcium (Ca)	N/A N/A	Neodymium (Nd)	N/A N/A	Thulium (Tm)	N/A
Cerium (Ce)	N/A	Nickel (Ni)	N/A N/A	Tin (Sn)	N/A
Cesium (Cs)	N/A	Niobium (Nb)	N/A N/A	Titanium (Ti)	N/A
Chromium (Cr)	N/A	Osmium (Os)	N/A N/A	Tungsten (W)	N/A
Cobalt (Co)	N/A	Palladium (Pd)	N/A N/A	Uranium (U)	N/A
Copper (Cu)	N/A N/A	Phosphorus (P)	N/A N/A	Vanadium (V)	N/A N/A
Dysprosium (Dy)	N/A N/A	Platinum (Pt)	N/A N/A	Ytterbium (Yb)	N/A N/A
Erbium (Er)	N/A N/A	Potassium (K)	N/A N/A	Yttrium (Y)	N/A N/A
Europium (Eu)	N/A N/A	Praseodymium (Pr		Zinc (Zn)	N/A N/A
Gadolinium (Gd)	N/A N/A	Rhenium (Re)	N/A	Zirconium (Zr)	
,		Rhodium (Rh)	N/A N/A	Zirconium (Zr)	N/A
Gallium (Ga)	N/A		N/A N/A		
Germanium (Ge)	N/A	Rubidium (Rb)			
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		
Iridium (Ir)	N/A	Silicon (Si)	N/A		
Iron (Fe)	N/A	Silver (Ag)	N/A		
Lanthanum (La)	N/A	Sodium (Na)	N/A		

Version: 1.6 Lot Number: SAMPLE Product Number: MSCD10KN Page 1 of 2

Specification	Reference
Cadmium ICPMS, 10,000 ppm / HNO3	EPA (200.8)
Cadmium ICPMS, 10,000 ppm / HNO3	EPA (SW-846) (6020)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
MSCD10KN-100	100 mL natural LDPE	18 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

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

Version: 1.6 Lot Number: SAMPLE Product Number: MSCD10KN Page 2 of 2