

# Certificate Of Analysis



Date of Release: 02/24/2022

Name: Nitric Acid  
OmniTrace® Ultra, 67 - 70%

Item No: NX0408 all size codes.

Lot / Batch No: 62055

Country of Origin: Canada

Characteristic	Requirement		Results	Units
	Min.	Max.		
Aluminum (Al)		20	< 1	ppt
Antimony (Sb)		10	< 0.05	ppt
Arsenic (As)		20	< 0.05	ppt
Assay (HNO <sub>3</sub> , w/w)	67	70	69	%
Barium (Ba)		10	< 0.1	ppt
Beryllium (Be)		10	< 0.01	ppt
Bismuth (Bi)		10	< 0.01	ppt
Boron (B)		10	< 2	ppt
Cadmium (Cd)		10	< 0.01	ppt
Calcium (Ca)		10	< 10	ppt
Cerium (Ce)		10	< 0.01	ppt
Cesium (Cs)		10	< 0.01	ppt
Chromium (Cr)		10	< 1	ppt
Cobalt (Co)		10	< 0.05	ppt
Copper (Cu)		10	< 0.2	ppt
Dysprosium (Dy)		1	< 0.01	ppt
Erbium (Er)		1	< 0.01	ppt
Europium (Eu)		1	< 0.01	ppt
Gadolinium (Gd)		1	< 0.01	ppt
Gallium (Ga)		10	< 0.05	ppt
Germanium (Ge)		10	< 0.05	ppt
Gold (Au)		20	< 1	ppt
Hafnium (Hf)		10	< 0.01	ppt
Holmium (Ho)		1	< 0.01	ppt
Indium (In)		1	< 0.01	ppt
Iron (Fe)		10	< 2	ppt
Lanthanum (La)		1	< 0.01	ppt
Lead (Pb)		10	< 0.05	ppt
Lithium (Li)		10	< 0.05	ppt
Lutetium (Lu)		1	< 0.01	ppt
Magnesium (Mg)		10	< 0.5	ppt
Manganese (Mn)		10	< 0.02	ppt

Mercury (Hg)		50	< 20	ppt
Molybdenum (Mo)		10	< 0.1	ppt
Neodymium (Nd)		1	< 0.01	ppt
Nickel (Ni)		20	< 5	ppt
Niobium (Nb)		1	< 0.05	ppt
Palladium (Pd)		20	< 1	ppt
Platinum (Pt)		20	< 1	ppt
Potassium (K)		10	< 0.5	ppt
Praseodymium (Pr)		1	< 0.01	ppt
Rhenium (Re)		10	< 0.01	ppt
Rhodium (Rh)		10	< 0.01	ppt
Rubidium (Rb)		10	< 0.01	ppt
Ruthenium (Ru)		20	< 0.02	ppt
Samarium (Sm)		1	< 0.01	ppt
Scandium (Sc)		10	< 0.01	ppt
Selenium (Se)		Information only	< 5	ppt
Silver (Ag)		10	< 0.05	ppt
Sodium (Na)		10	< 0.5	ppt
Strontium (Sr)		10	< 0.02	ppt
Tantalum (Ta)		Information only	< 0.01	ppt
Tellurium (Te)		1	< 0.05	ppt
Terbium (Tb)		1	< 0.01	ppt
Thallium (Tl)		10	< 0.01	ppt
Thorium (Th)		1	< 0.01	ppt
Thulium (Tm)		1	< 0.01	ppt
Tin (Sn)		20	< 0.1	ppt
Titanium (Ti)		10	< 0.5	ppt
Tungsten (W)		10	< 0.05	ppt
Uranium (U)		1	< 0.01	ppt
Vanadium (V)		10	< 0.05	ppt
Ytterbium (Yb)		1	< 0.01	ppt
Yttrium (Y)		1	< 0.01	ppt
Zinc (Zn)		10	< 0.1	ppt
Zirconium (Zr)		10	< 0.01	ppt

Joe Schoellkopff

Quality Control Manager

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EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation

400 Summit Drive  
Burlington, MA 01803  
U.S.A.