

# PlasmaPURE High Purity Acids

Pure Acids for Perfect Results

PlasmaPURE acids are manufactured with trace metals equal to or less than 1 ppb. Used for environmental and industrial applications in ICP-AES and flame atomic absorption spectroscopy.

**NEW!**



Certificate of Analysis					
PlasmaPURE			HYDROCHLORIC ACID (34-37% HCl)		
Catalogue Number:		250-037-113	Opened Bottle Expiry Information		
Lot Number:		SC94802	15 months after opening, up to unopened expiration date		
Assay (HCl w/w):		36%	Date bottle opened		
Expiry Date:		January 2008			
Analyte	Maximum Specification	Actual Value (in ppb)	Analyte	Maximum Specification	Actual Value (in ppb)
Aluminum (Al)	1 ppb	<0.5	Neodymium (Nd)	0.5 ppb	<0.1
Antimony (Sb)	1 ppb	<0.1	Nickel (Ni)	1 ppb	<0.1
Arsenic (As)	1 ppb	<0.1	Niobium (Nb)	0.5 ppb	<0.1
Barium (Ba)	1 ppb	<0.1	Palladium (Pd)	Information Only	<1
Beryllium (Be)	1 ppb	<0.1	Platinum (Pt)	Information Only	<1
Bismuth (Bi)	1 ppb	<0.1	Potassium (K)	1 ppb	<0.1
Boron (B)	1 ppb	<0.5	Praseodymium (Pr)	0.5 ppb	<0.1
Cadmium (Cd)	1 ppb	<0.1	Rhenium (Rh)	0.5 ppb	<0.1
Calcium (Ca)	1 ppb	<0.5	Rhodium (Rh)	0.5 ppb	<0.1
Cerium (Ce)	0.5 ppb	<0.1	Rubidium (Rb)	0.5 ppb	<0.1
Cesium (Cs)	0.5 ppb	<0.1	Ruthenium (Ru)	0.5 ppb	<0.1
Chromium (Cr)	1 ppb	<0.1	Samarium (Sm)	0.5 ppb	<0.1
Cobalt (Co)	1 ppb	<0.1	Scandium (Sc)	0.5 ppb	<0.1
Copper (Cu)	0.5 ppb	<0.1	Selenium (Se)	1 ppb	<0.1
Copper (Cu)	0.5 ppb	<0.1	Silver (Ag)	1 ppb	<0.1
Copper (Cu)	0.5 ppb	<0.1	Sodium (Na)	1 ppb	<0.5
Europium (Eu)	0.5 ppb	<0.1	Strontium (Sr)	1 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Tantalum (Ta)	Information Only	<1
Europium (Eu)	0.5 ppb	<0.1	Tellurium (Te)	0.5 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Terbium (Tb)	0.5 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Thallium (Tl)	0.5 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Thorium (Th)	1 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Thulium (Tm)	0.5 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Tin (Sn)	1 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Titanium (Ti)	1 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Tungsten (W)	0.5 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Uranium (U)	1 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Vanadium (V)	1 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Ytterbium (Yb)	0.5 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Yttrium (Y)	0.5 ppb	<0.1
Europium (Eu)	0.5 ppb	<0.1	Zinc (Zn)	1 ppb	<0.5
Europium (Eu)	0.5 ppb	<0.1	Zirconium (Zr)	1 ppb	<0.1

- Complete with a Certificate of Analysis with lot number, expiry date, and maximum specification for over 60 analytes
  - Complete documentation for audit purposes
- Refined for low level trace metals analysis
- 2 expiry dates (up to 3 years unopened & 15 months opened)
  - Long shelf life for unopened bottles

## Ordering Information

Always in Stock

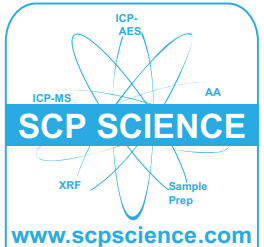
ELEMENT	ASSAY	500 ml cs/6	CATALOG NUMBER		4 L cs/4
			2.5 L cs/6	2.5 L SC* cs/6	
Hydrochloric Acid	33-36% HCl	250-037-113	250-037-115	250-037-117	250-037-119
Hydrofluoric Acid**	47-51% HF	250-037-121	---	---	250-037-123
Nitric Acid	67-70 HNO <sub>3</sub>	250-037-129	250-037-131	250-037-133	---
Sulphuric Acid	93-98% H <sub>2</sub> SO <sub>4</sub>	250-037-137	250-037-139	250-037-141	---

\* Coated Glass Bottle

\*\* Packaged in LDPE Bottle

PlasmaPURE acids & reagents are used in many industries and applications such as:

INDUSTRY	APPLICATION	METHOD
Geology & Geoscience	Soil, rock, mineral analysis	Digestions of rock Dating by isotope ratio
Clinical	Tissue & blood	US Center for Disease Control
Aerospace	Alloys, steel, metal, powders & ceramics	Acid digestion



Sample Prep

ICP-AES & MS

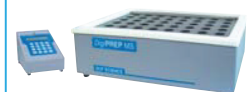
AA

XRF

Calibration Standards

Certified Reference Materials

DigiPREP MS  
Graphite Block  
Digestion System



- Ideal for most acid digestion
- Provides uniform temp. across the block
- Teflon® Coated Graphite block
- High quality parts for peak performance

**Start-Up Kits Available!**

Call for more information or to request a quotation!

MK-MKG003-HPPA-1.0-E

USA  
Tel.: (800) 361-6820  
Fax: (800) 253-5549

Canada / International  
Tel.: (800) 361-6820 / (514) 457-0701  
Fax: (800) 253-5549 / (514) 457-4499

Europe  
Tel.: +33 (0)1 69 18 71 17  
Fax: +33 (0)1 60 92 05 67

# PlasmaPURE Plus High Purity Acids & Reagents *Pure Acids for Perfect Results*

PlasmaPURE Plus acids are manufactured with trace metals levels less than 10 ppt (0.01 ppb). Commonly used in semiconductor, nuclear, clinical, pharmaceutical, and geochemical analysis. Used for sample and standards preparation for ICP-AES, ICP-MS, Flame AA and Graphite Furnace AA spectroscopy.

- Complete with a Certificate of Analysis with lot number, expiry date, and maximum concentration specification for over 60 elements
  - Complete documentation for audit purposes
- Packaged in Class 10 cleanroom conditions
  - Supplied in preleached Teflon bottles for optimum quality
- Available in sizes from 250 ml to 2 liters
  - Flexibility - Buy only what is required. Save money with large volumes

Lot Number:	250-036-131		
Assay (HNO <sub>3</sub> ):	SC58901		
Expiry Date:	70%		
Maximum:	March 2008		
Specification	Actual Value (in ppt)	Maximum Specification	Actual Value (in ppt)
Aluminum (Al)	20 ppt	+10	1 ppt
Antimony (Sb)	10 ppt	+10	50 ppt
Arsenic (As)	20 ppt	+10	1 ppt
Barium (Ba)	10 ppt	+1	1 ppt
Beryllium (Be)	10 ppt	+5	20 ppt
Bismuth (Bi)	10 ppt	+0.1	10 ppt
Boron (B)	20 ppt	+10	1 ppt
Cadmium (Cd)	10 ppt	+0.05	10 ppt
Calcium (Ca)	20 ppt	+10	10 ppt
Caesium (Cs)	20 ppt	+10	10 ppt
Cerium (Ce)	10 ppt	+0.05	10 ppt
Chromium (Cr)	20 ppt	+10	10 ppt
Cobalt (Co)	10 ppt	+1	10 ppt
Copper (Cu)	20 ppt	+5	10 ppt
Dysprosium (Dy)	1 ppt	+0.01	10 ppt
Erbium (Er)	1 ppt	+0.01	10 ppt
Europium (Eu)	1 ppt	+0.01	10 ppt
Gadolinium (Gd)	1 ppt	+0.01	10 ppt
Gallium (Ga)	10 ppt	+1	10 ppt
Germanium (Ge)	10 ppt	+1	10 ppt
Gold (Au)	20 ppt	+10	10 ppt
Indium (In)	10 ppt	+10	10 ppt
Iridium (Ir)	1 ppt	+1	10 ppt
Itanium (Ta)	10 ppt	+0.05	10 ppt
Iron (Fe)	10 ppt	+10	10 ppt
Lithium (Li)	10 ppt	+10	10 ppt
Magnesium (Mg)	10 ppt	+10	10 ppt
Manganese (Mn)	10 ppt	+10	10 ppt
Molybdenum (Mo)	10 ppt	+10	10 ppt
Nickel (Ni)	10 ppt	+10	10 ppt
Niobium (Nb)	10 ppt	+10	10 ppt
Platinum (Pt)	10 ppt	+10	10 ppt
Potassium (K)	10 ppt	+10	10 ppt
Radium (Ra)	10 ppt	+10	10 ppt
Rhenium (Re)	10 ppt	+10	10 ppt
Rhodium (Rh)	10 ppt	+10	10 ppt
Rubidium (Rb)	10 ppt	+10	10 ppt
Samarium (Sm)	10 ppt	+10	10 ppt
Scandium (Sc)	10 ppt	+10	10 ppt
Selenium (Se)	10 ppt	+10	10 ppt
Silver (Ag)	10 ppt	+10	10 ppt
Sodium (Na)	10 ppt	+10	10 ppt
Strontium (Sr)	10 ppt	+10	10 ppt
Tantalum (Ta)	10 ppt	+10	10 ppt
Tellurium (Te)	10 ppt	+10	10 ppt
Thallium (Tl)	10 ppt	+10	10 ppt
Thorium (Th)	10 ppt	+10	10 ppt
Thulium (Tm)	10 ppt	+10	10 ppt
Tin (Sn)	10 ppt	+10	10 ppt
Titanium (Ti)	10 ppt	+10	10 ppt
Tungsten (W)	10 ppt	+10	10 ppt
Vanadium (V)	10 ppt	+10	10 ppt
Zinc (Zn)	10 ppt	+10	10 ppt
Zirconium (Zr)	10 ppt	+10	10 ppt



NEW!

## Ordering Information

Always in Stock

ELEMENT	ASSAY	250 ml	CATALOG NUMBER			
			500 ml	1 L	2 L	
Acetic Acid	>99% CH <sub>3</sub> COOH	250-036-101	250-036-103	250-036-105	---	
Ammonia Solution	20-22% NH <sub>3</sub>	250-036-107	250-036-109	250-036-111	---	
Hydrochloric Acid	33-36% HCl	250-036-113	250-036-115	250-036-117	250-036-119	
Hydrofluoric Acid	47-51% HF	250-036-121	250-036-123	250-036-125	250-036-127	
Hydrogen Peroxide	30% H <sub>2</sub> O <sub>2</sub>	---	250-036-145	---	---	
Nitric Acid	67-70 HNO <sub>3</sub>	250-036-129	250-036-131	250-036-133	250-036-135	
Sulphuric Acid	93-98% H <sub>2</sub> SO <sub>4</sub>	250-036-137	250-036-139	250-036-141	250-036-143	

### PlasmaPURE Plus Accessories

Description	Catalog Number
Base Only for PlasmaPURE Plus Top Dispenser	250-036-500
PlasmaPURE Plus Bottle Top Dispenser	250-036-501

PlasmaPURE Plus acids & reagents are used in many industries and applications such as:

INDUSTRY	APPLICATION	METHOD
Environmental	Water & Waste Water Analysis	Method 200.8 (Drinking Water) EPA Method 6010 (Total Metals in Waste Water SW-846)
Agricultural	Soil & Plant Tissue	Method 3050B (Total Metals in Soil by ICP-MS)
Semiconductor & Intergrated Circuits	Quality Control Analysis	Acid Digestion