

# PlasmaPURE

## TRACE METAL

### GRADE ACIDS

- No more glass bottles
- Supplied in shatter proof plastic (no need for safety coating)
- Lighter for easier transport to the lab

PlasmaPURE acids are manufactured with trace metal impurities less than 1 ppb.

Intended for analysis above 1ppb using ICP, ICPMS, flame AA or graphite furnace AA.

Sold in individual bottles with volume discounts for larger orders.

Complete with a Certificate of Analysis with lot number, expiry date, and actual concentration of over 60 elements:

- Complete documentation for audit purposes

2 expiry dates (up to 3 years unopened & 15 months opened):

SCP SCIENCE

PlasmaPURE

Certificate of Analysis

Hydrochloric Acid (34 - 37% HCl)

Catalogue Number: 250-038-151 / 250-038-155  
 Lot Number: SCA2095851  
 Assay (HCl w/w): 35%  
 Colour (APMA): +10 (Specification: Max 10)  
 Expiry Date: December 2014

Opened Bottle Expiry Information  
 15 months after opening, up to unopened expiration date.  
 Date bottle opened:

Analyte	Maximum Specification	Actual Value (ppb)	Actual Value (ppb)	Analyte	Maximum Specification	Actual Value (ppb)
Aluminum (Al)	1 ppb	< 0.5		Neodymium (Nd)	0.1 ppb	< 0.1
Antimony (Sb)	0.5 ppb	< 0.1		Nickel (Ni)	0.5 ppb	< 0.1
Arsenic (As)	0.5 ppb	< 0.1		Niobium (Nb)	0.1 ppb	< 0.1
Barium (Ba)	0.1 ppb	< 0.1		Palladium (Pd)	Information Only	< 0.5
Beryllium (Be)	0.1 ppb	< 0.1		Platinum (Pt)	Information Only	< 0.5
Bismuth (Bi)	0.1 ppb	< 0.1		Potassium (K)	1 ppb	< 0.1
Boron (B)	1 ppb	< 0.5		Praseodymium (Pr)	0.1 ppb	< 0.1
Calcium (Ca)	0.1 ppb	< 0.1		Rhenium (Re)	0.1 ppb	< 0.1
Carbon (C)	1 ppb	< 0.5		Rhodium (Rh)	0.1 ppb	< 0.1
Cerium (Ce)	0.1 ppb	< 0.1		Rubidium (Rb)	0.1 ppb	< 0.1
Chromium (Cr)	0.5 ppb	< 0.1		Ruthenium (Ru)	0.1 ppb	< 0.1
Cobalt (Co)	0.1 ppb	< 0.1		Samarium (Sm)	0.1 ppb	< 0.1
Chromium (Cr)	0.5 ppb	< 0.1		Sandium (Sd)	0.1 ppb	< 0.1
Copper (Cu)	0.5 ppb	< 0.1		Selenium (Se)	1 ppb	< 0.1
Cyclopentadiene (Cp)	0.1 ppb	< 0.1		Silver (Ag)	1 ppb	< 0.1
Diethylamine (DEA)	0.1 ppb	< 0.1		Sodium (Na)	1 ppb	< 0.5
Dibutylamine (DBA)	0.1 ppb	< 0.1		Strontium (Sr)	0.5 ppb	< 0.1
Diphenylamine (DPA)	0.1 ppb	< 0.1		Tantalum (Ta)	Information Only	< 1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Tellurium (Te)	0.1 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Thallium (Tl)	0.1 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Thorium (Th)	0.1 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Thulium (Tm)	0.1 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Tin (Sn)	0.5 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Titanium (Ti)	0.5 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Tungsten (W)	0.1 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Uranium (U)	0.3 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Vanadium (V)	0.5 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Ytterbium (Yb)	0.3 ppb	< 0.1
Dodecylamine (DDA)	0.1 ppb	< 0.1		Zinc (Zn)	1 ppb	< 0.5
Dodecylamine (DDA)	0.1 ppb	< 0.1		Zirconium (Zr)	0.1 ppb	< 0.1

Analyte	Maximum Specification	Actual Value (ppm)
Total Sulphur (S)	0.3 ppm	< 0.3
Free Chlorine (Cl)	0.5 ppm	< 0.5

Certificate Date: December 23, 2011

Trace metal contamination: The inner pack of plastic bags and bottles should be opened under the product. The use of safety apparel, as well as eye protection, plastic gloves, hair net and cap. Check and this Certificate of Analysis are available on our web site: SCP SCIENCE (www.scp-science.com)



## ORDERING INFORMATION

DESCRIPTION	ASSAY	500 ml	2.5 L	4 L
Hydrochloric Acid	34 - 37% HCl	250-038-151	250-038-155	250-037-159
Hydrofluoric Acid	47 - 51% HF	250-038-161*	---	250-037-169*
Nitric Acid	67 - 70% HNO <sub>3</sub>	250-038-171	250-038-175	---
Sulphuric Acid	93 - 96% H <sub>2</sub> SO <sub>4</sub>	250-038-181	250-038-185	---
Ammonia Solution	20 - 22% NH <sub>3</sub>	250-038-191	---	250-037-199

\* Packaged in LDPE Bottle

### NORTH AMERICA / INTERNATIONAL

Tel.: +1 (800) 361-6820 or  
 Tel.: +1 (514) 457-0701  
 Fax: +1 (800) 253-5549 or  
 Fax: +1 (514) 457-4499

### FRANCE

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

### GERMANY

Tel.: +49 (0) 8342-89560-61  
 Fax: +49 (0) 8342-89560-69

# PlasmaPURE Plus OPTIMA GRADE ACIDS & REAGENTS

PlasmaPURE Plus acids are manufactured with trace metal impurities less than 10 ppt (0.01 ppb)

Packaged in Class 10 cleanroom conditions  
• Supplied in preleached Teflon® bottles for optimum purity

Intended for analysis below 1 ppb by ICP, ICPMS, or graphite furnace AA

Available in sizes from 250 ml to 2 liters  
• Flexibility - Buy only what is required  
• Volume discounts available

Complete with a Certificate of Analysis with lot number, expiry date and actual concentration or over 60 elements  
• Complete documentation for audit purposes

### Certificate of Analysis

PlasmaPURE Plus Hydrochloric Acid (32-35% HCl)

Catalogue Number: 250-036-113/250-036-115 / 250-036-117/250-036-119  
Lot Number: SCP123655  
Assay (HCl w/w): 34%  
Expiry Date: February 2008

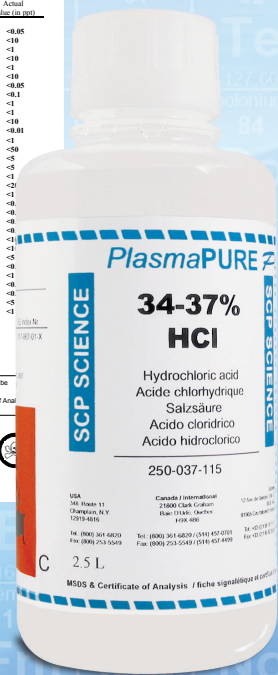
**Opened Bottle Expiry Information**  
15 months after opening, up to unopened expiration date  
Date bottle opened: \_\_\_\_\_

Analyte	Maximum Specification (ppb)	Actual Value (ppb)	Analyte	Maximum Specification (ppb)	Actual Value (ppb)
Aluminium (Al)	20	<-10	Niobium (Nb)	1	<-0.05
Antimony (Sb)	20	<-20	Nickel (Ni)	50	<-10
Arsenic (As)	50	<-20	Niobium (Nb)	1	<-1
Barium (Ba)	10	<-1	Palladium (Pd)	Information Only	<-10
Beryllium (Be)	10	<-5	Platinum (Pt)	Information Only	<-1
Bismuth (Bi)	10	<-0.05	Praseodymium (Pr)	10	<-10
Boron (B)	100	<-10	Praseodymium (Pr)	1	<-0.05
Calcium (Ca)	10	<-0.1	Rhenium (Re)	10	<-0.1
Calcium (Ca)	20	<-10	Rhodium (Rh)	10	<-1
Cerium (Ce)	10	<-0.05	Rubidium (Rb)	10	<-1
Cesium (Cs)	10	<-0.05	Ruthenium (Ru)	10	<-10
Chromium (Cr)	20	<-10	Samarium (Sm)	1	<-0.01
Cobalt (Co)	10	<-3	Scandium (Sc)	10	<-1
Copper (Cu)	20	<-3	Selenium (Se)	Information Only	<-50
Dysprosium (Dy)	1	<-0.01	Silver (Ag)	10	<-5
Erbium (Er)	1	<-0.01	Sodium (Na)	10	<-5
Eurprium (Eu)	1	<-0.01	Strontium (Sr)	10	<-5
Gadolinium (Gd)	1	<-0.01	Tantalum (Ta)	Information Only	<-20
Gallium (Ga)	10	<-1	Tellurium (Te)	1	<-1
Germanium (Ge)	0	N/A	Terbium (Tb)	1	<-0.1
Gold (Au)	100	<-10	Thallium (Tl)	10	<-0.1
Hafnium (Hf)	10	<-0.05	Thorium (Th)	1	<-0.1
Holmium (Ho)	1	<-0.01	Thulium (Tm)	1	<-0.1
Iodine (I)	1	<-0.1	Tin (Sn)	20	<-1
Iron (Fe)	20	<-10	Titanium (Ti)	20	<-1
Lanthanum (La)	1	<-0.05	Tungsten (W)	10	<-5
Lead (Pb)	10	<-1	Uranium (U)	1	<-0.1
Lithium (Li)	10	<-1	Vanadium (V)	10	<-1
Lutetium (Lu)	10	<-0.01	Vanadium (V)	1	<-0.1
Magnesium (Mg)	10	<-5	Yttrium (Y)	1	<-0.1
Manganese (Mn)	10	<-2	Zinc (Zn)	20	<-5
Mercury (Hg)	100	<-100	Zirconium (Zr)	10	<-1
Molybdenum (Mo)	10	<-5			

Certified by: *Aiketa Masha, Chemist* Certification Date: May 4, 2005

To maintain product integrity and reduce the risk of trace metal contamination, the inner pack of plastic bags and bottles should be opened under CLASS 100 particle conditions to maintain the integrity of the product. The use of safety apparel, as well as eye protection, plastic gloves, hair net and a clean room suit is also advised. The Material Safety Data Sheet and this Certificate of Analysis are available on our web site. (Equipment disposable or hazardous)

Manufactured according to an ISO 9001:2000 Quality System and ISO 17025 (in-process)  
SCP SCIENCE  
21800 Clark Graham, Suite D-104, SC, Canada H9K 4B6  
Phone: (514) 457-0701 Fax: (514) 457-4499  
Web Site: www.scpscience.com



## ORDERING INFORMATION

DESCRIPTION	ASSAY	250 ml	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 Dispenser	---	250-036-501			

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