

**INORGANIC STANDARDS FOR PLASMA EMISSION SPECTROSCOPY ICP • DCP • ICP-MS**
**Reliability:**

Reagecon have been manufacturing inorganic Standards, Controls and Calibrators for Spectroscopy for almost two decades. During that time the Company has established itself as a highly reliable primary producer of top quality standards. Our customer base in over 30 countries is testament of our efforts to be leaders in an ever changing field where limits of detection are becoming exceedingly demanding.

**Experience:**

Reagecon have built up a wealth of experience and knowledge unparalleled in standards Technology. We have forseen the growth in Plasma Emission Spectroscopy and have responded with over 70 top quality single element and several multi-element Standards. The endeavours of our Chemists to build specificity, accuracy and stability into long lasting and cost effective formulations is gaining worldwide acceptance

**Economical:**

Reagecon's Plasma Emission Spectroscopy Standards are produced in attractive twin neck 100ml and 250ml economy pack sizes, significantly increasing the value for money aspect of Reagecon Standards and makes the most expensive element affordable.

**Controlled:**

Reagecon's Standards are manufactured in a highly controlled and sophisticated environment.

- High purity starting materials
- < 18 megaohm water
- High purity matrix material
- Pre-leached and pre-cleaned bottle.

**Options:**

Reagecon offer more options than almost any other manufacturer.

- Up to 70 single element standards
- Many multi - element
- Several matrices
- Concentration options
- Pack size options
- Customised Standards

All at the highest quality and at an affordable price.

**New Packaging:**

Reagecon is pleased to announce the introduction of it's new twin neck bottle which completely eliminates the risk of contamination, evaporation or interference with the Standard contents. This new format ensures.

- Longer shelf
- No risk of contamination
- Greater accuracy
- Reduced cost per test

**INORGANIC SPECTROSCOPY STANDARDS**

Element Product No.	Matrix	Conc µg/ml	Pack Size
<b>Aluminum</b>			
PAI2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PAI2A2		1,000µg/ml	100ml
PAI4B2		10,000µg/ml	250ml
PAI2B3	2-5% HCl	1,000µg/ml	250ml
PAI4B3		10,000µg/ml	250ml
<b>Antimony</b>			
PSb2B4	6% Tartaric Acid	1,000µg/ml	250ml
PSb2A4		1,000µg/ml	100ml
PSb4B4	+ tr HNO <sub>3</sub>	10,000µg/ml	250ml
PSb2B5	20% HCl (in Teflon)	1,000µg/ml	250ml
PSb4B5		10,000µg/ml	250ml
<b>Arsenic</b>			
PAs2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PAs2A2		1,000µg/ml	100ml
PAs4B2		10,000µg/ml	250ml
PAs2B3	2-5% HCl	1,000µg/ml	250ml
PAs4B3		10,000µg/ml	250ml
<b>Barium</b>			
PBa2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PBa2A2		1,000µg/ml	100ml
PBa4B2		10,000µg/ml	250ml
PBa2B3	2-5% HCl	1,000µg/ml	250ml
PBa4B3		10,000µg/ml	250ml
<b>Beryllium</b>			
PBe2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PBe2A2		1,000µg/ml	100ml
PBe4B2		10,000µg/ml	250ml
<b>Bismuth</b>			
PBi2B6	10% HNO <sub>3</sub>	1,000µg/ml	250ml
PBi2A6		1,000µg/ml	100ml
PBi4B6		10,000µg/ml	250ml
<b>Boron</b>			
PB2B7	H <sub>2</sub> O	1,000µg/ml	250ml
PB2A7		1,000µg/ml	100ml
PB4B7		10,000µg/ml	250ml
<b>Cadmium</b>			
PCd2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PCd2A2		1,000µg/ml	100ml
PCd4B2		10,000µg/ml	250ml
PCd2B3	2-5% HCl	1,000µg/ml	250ml
PCd4B3		10,000µg/ml	250ml

Element Product No.	Matrix	Conc µg/ml	Pack Size
<b>Calcium</b>			
PCa2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PCa2A2		1,000µg/ml	100ml
PCa4B2		10,000µg/ml	250ml
PCa2B3	2-5% HCl	1,000µg/ml	250ml
PCa4B3		10,000µg/ml	250ml
<b>Carbon</b>			
PC2B7	H <sub>2</sub> O	1,000µg/ml	250ml
PC2A7		1,000µg/ml	100ml
PC4B7		10,000µg/ml	250ml
<b>Cerium</b>			
PCe2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PCe2A2		1,000µg/ml	100ml
PCe4B2		10,000µg/ml	250ml
<b>Cesium</b>			
PCs2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PCs2A2		1,000µg/ml	100ml
PCs4B2		10,000µg/ml	250ml
<b>Chromium</b>			
PCr2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PCr2A2		1,000µg/ml	100ml
PCr4B2		10,000µg/ml	250ml
PCr2B3	2-5% HCl	1,000µg/ml	250ml
PCr4B3		10,000µg/ml	250ml
PCr2B7	H <sub>2</sub> O	1,000µg/ml	250ml
PCr4B7		10,000µg/ml	250ml
<b>Cobalt</b>			
PCo2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PCo2A2		1,000µg/ml	100ml
PCo4B3		10,000µg/ml	250ml
<b>Copper</b>			
PCu2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PCu2A2		1,000µg/ml	100ml
PCu4B2		10,000µg/ml	250ml
PCu2B3	2-5% HCl	1,000µg/ml	250ml
PCu4B3		10,000µg/ml	250ml
<b>Dysprosium</b>			
PDy2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PDy2A2		1,000µg/ml	100ml
PDy4B2		10,000µg/ml	250ml

**INORGANIC SPECTROSCOPY STANDARDS**

Element Product No.	Matrix	Conc µg/ml	Pack Size
<b>Erbium</b>			
PEr2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PEr2A2		1,000µg/ml	100ml
PEr4B2		10,000µg/ml	250ml
<b>Europium</b>			
PEu2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PEu2A2		1,000µg/ml	100ml
PEu4B2		10,000µg/ml	250ml
<b>Gadolinium</b>			
PGd2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PGd2A2		1,000µg/ml	100ml
PGd4B2		10,000µg/ml	250ml
<b>Gallium</b>			
PGa2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PGa2A2		1,000µg/ml	100ml
PGa4B2		10,000µg/ml	250ml
<b>Germanium</b>			
PGe2B7	H <sub>2</sub> O/tr HF	1,000µg/ml	250ml
PGe2A7		1,000µg/ml	100ml
PGe4B7		10,000µg/ml	250ml
<b>Gold</b>			
PAu2B8	10% HCl	1,000µg/ml	250ml
PAu2A8		1,000µg/ml	100ml
PAu4B8		10,000µg/ml	250ml
<b>Hafnium</b>			
PHf2B3	2-5% HCl	1,000µg/ml	250ml
PHf2A3		1,000µg/ml	100ml
PHf4B3		10,000µg/ml	250ml
<b>Holmium</b>			
PHo2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PHo2A2		1,000µg/ml	100ml
PHo4B2		10,000µg/ml	250ml
<b>Indium</b>			
PIIn2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PIIn2A2		1,000µg/ml	100ml
PIIn4B2		10,000µg/ml	250ml
<b>Iridium</b>			
PIr2B8	10% HCl	1,000µg/ml	250ml
PIr2A8		1,000µg/ml	100ml
PIr4B8		10,000µg/ml	250ml

Element Product No.	Matrix	Conc µg/ml	Pack Size
<b>Iron</b>			
PFe2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PFe2A2		1,000µg/ml	100ml
PFe4B2		10,000µg/ml	250ml
PFe2B3	2-5% HCl	1,000µg/ml	250ml
PFe4B3		10,000µg/ml	250ml
<b>Lanthanum</b>			
PLa2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PLa2A2		1,000µg/ml	100ml
PLa4B2		10,000µg/ml	250ml
<b>Lead</b>			
PPb2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PPb2A2		1,000µg/ml	100ml
PPb4B2		10,000µg/ml	250ml
<b>Lithium</b>			
PLi2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PLi2A2		1,000µg/ml	100ml
PLi4B2		10,000µg/ml	250ml
PLi2B3	2-5% HCl	1,000µg/ml	250ml
PLi4B3		10,000µg/ml	250ml
<b>Lutetium</b>			
PLu2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PLu2A2		1,000µg/ml	100ml
PLu4B2		10,000µg/ml	250ml
<b>Magnesium</b>			
PMg2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PMg2A2		1,000µg/ml	100ml
PMg4B2		10,000µg/ml	250ml
PMg2B3	2-5% HCl	1,000µg/ml	250ml
PMg4B3		10,000µg/ml	250ml
<b>Manganese</b>			
PMn2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PMn2A2		1,000µg/ml	100ml
PMn4B2		10,000µg/ml	250ml
<b>Mercury</b>			
PHg2B6	10% HNO <sub>3</sub>	1,000µg/ml	250ml
PHg2A6		1,000µg/ml	100ml
PHg4B6		10,000µg/ml	250ml
<b>Molybdenum</b>			
PMo2B7	H <sub>2</sub> O	1,000µg/ml	250ml
PMo2A7		1,000µg/ml	100ml
PMo4B7		10,000µg/ml	250ml

**INORGANIC SPECTROSCOPY STANDARDS**

Element Product No.	Matrix	Conc µg/ml	Pack Size
<b>Neodymium</b>			
PNd2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PNd2A2		1,000µg/ml	100ml
PNd4B2		10,000µg/ml	250ml
<b>Nickel</b>			
PNi2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PNi2A2		1,000µg/ml	100ml
PNi4B2		10,000µg/ml	250ml
<b>Niobium</b>			
PNb2B9	H <sub>2</sub> O/tr HF	1,000µg/ml	250ml
PNb2A9		1,000µg/ml	100ml
PNb4B9		10,000µg/ml	250ml
<b>Palladium</b>			
PPd2B8	10% HCl	1,000µg/ml	250ml
PPd2A8		1,000µg/ml	100ml
PPd4B8		10,000µg/ml	250ml
<b>Phosphorus</b>			
PP2B7	H <sub>2</sub> O	1,000µg/ml	250ml
PP2A7		1,000µg/ml	100ml
PP4B7		10,000µg/ml	250ml
<b>Platinum</b>			
PPt2B8	10% HCl	1,000µg/ml	250ml
PPt2A8		1,000µg/ml	100ml
PPt4B8		10,000µg/ml	250ml
<b>Potassium</b>			
PK2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PK2A2		1,000µg/ml	100ml
PK4B2		10,000µg/ml	250ml
PK2B3	2-5% HCl	1,000µg/ml	250ml
PK4B3		10,000µg/ml	250ml
<b>Praseodymium</b>			
PPr2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PPr2A2		1,000µg/ml	100ml
PPr4B2		10,000µg/ml	250ml
<b>Rhenium</b>			
PRe2B7	H <sub>2</sub> O	1,000µg/ml	250ml
PRe2A7		1,000µg/ml	100ml
PRe4B7		10,000µg/ml	250ml
<b>Rhodium</b>			
PRh2B8	10% HCl	1,000µg/ml	250ml
PRh2A8		1,000µg/ml	100ml
PRh4B8		10,000µg/ml	250ml

Element Product No.	Matrix	Conc µg/ml	Pack Size
<b>Rubidium</b>			
PRb2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PRb2A2		1,000µg/ml	100ml
PRb4B2		10,000µg/ml	250ml
<b>Ruthenium</b>			
PRu2B8	10% HCl	1,000µg/ml	250ml
PRu2A8		1,000µg/ml	100ml
PRu4B8		10,000µg/ml	250ml
<b>Samarium</b>			
PSm2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PSm2A2		1,000µg/ml	100ml
PSm4B2		10,000µg/ml	250ml
<b>Scandium</b>			
PSc2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PSc2A2		1,000µg/ml	100ml
PSc4B2		10,000µg/ml	250ml
<b>Selenium</b>			
PSe2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PSe2A2		1,000µg/ml	100ml
PSe4B2		10,000µg/ml	250ml
<b>Silicon</b>			
PSi2B9	H <sub>2</sub> O/tr HF	1,000µg/ml	250ml
PSi2A9		1,000µg/ml	100ml
PSi4B9		10,000µg/ml	250ml
PSi2B7	H <sub>2</sub> O	1,000µg/ml	250ml
PSi4B7		10,000µg/ml	250ml
<b>Silver</b>			
PAg2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PAg2A2		1,000µg/ml	100ml
PAg4B2		10,000µg/ml	250ml
<b>Sodium</b>			
PNa2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PNa2A2		1,000µg/ml	100ml
PNa4B2		10,000µg/ml	250ml
PNa2B3	2-5% HCl	1,000µg/ml	250ml
PNa4B3		10,000µg/ml	250ml
<b>Strontium</b>			
PSr2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PSr2A2		1,000µg/ml	100ml
PSr4B2		10,000µg/ml	250ml
PSr2B3	2-5% HCl	1,000µg/ml	250ml
PSr4B3		10,000µg/ml	250ml

**INORGANIC SPECTROSCOPY STANDARDS**

Element Product No.	Matrix	Conc µg/ml	Pack Size
<b>Sulphur</b>			
PS2B7	H <sub>2</sub> O	1,000µg/ml	250ml
PS2A7		1,000µg/ml	100ml
PS4B7		10,000µg/ml	250ml
<b>Tantalum</b>			
PTa2B9	H <sub>2</sub> O/tr HF	1,000µg/ml	250ml
PTa2A9		1,000µg/ml	100ml
PTa4B9		10,000µg/ml	250ml
<b>Tellurium</b>			
PTe2B10	5% HNO <sub>3</sub>	1,000µg/ml	250ml
PTe2A10		1,000µg/ml	100ml
PTe4B11	20% HNO <sub>3</sub>	10,000µg/ml	250ml
PTe2B8	10% HCl	1,000µg/ml	250ml
PTe4B12	30% HCl (Teflon)	10,000µg/ml	250ml
<b>Terbium</b>			
PTb2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PTb2A2		1,000µg/ml	100ml
PTb4B2		10,000µg/ml	250ml
<b>Thallium</b>			
PTI2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PTI2A2		1,000µg/ml	100ml
PTI4B2		10,000µg/ml	250ml
<b>Thorium</b>			
PTh2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PTh2A2		1,000µg/ml	100ml
PTh4B2		10,000µg/ml	250ml
<b>Thulium</b>			
PTm2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PTm2A2		1,000µg/ml	100ml
PTm4B2		10,000µg/ml	250ml
<b>Tin</b>			
PSn2B13	1% HNO <sub>3</sub> / 1% HF	1,000µg/ml	250ml
PSn4B19	2% HNO <sub>3</sub>	10,000µg/ml	250ml
PSn2B5	20% HCL/	1,000µg/ml	250ml
PSn2A5	1% HF	1,000µg/ml	100ml
PSn4B5	in Teflon	10,000µg/ml	250ml
<b>Titanium</b>			
PTi2B9	H <sub>2</sub> O/tr HF	1,000µg/ml	250ml
PTi2A9		1,000µg/ml	100ml
PTi4B9		10,000µg/ml	250ml
PTi2B5	20% HCl	1,000µg/ml	250ml
PTi4B5	40% HCL (Teflon)	10,000µg/ml	250ml

Element Product No.	Matrix	Conc µg/ml	Pack Size
<b>Tungsten</b>			
PW2B7	H <sub>2</sub> O	1,000µg/ml	250ml
PW2A7		1,000µg/ml	100ml
PW4B7		10,000µg/ml	250ml
PW2B14	1% HNO <sub>3</sub> +2% HF	1,000µg/ml	250ml
PW4B15	2% HNO <sub>3</sub> +5% HF	10,000µg/ml	250ml
<b>Uranium</b>			
PU2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PU2A2		1,000µg/ml	100ml
PU4B2		10,000µg/ml	250ml
<b>Vanadium</b>			
PV2B19	2% HNO <sub>3</sub>	1,000µg/ml	250ml
PV2A19		1,000µg/ml	100ml
PV4B16	15% HNO <sub>3</sub>	10,000µg/ml	250ml
PV2B3	2% HCl	1,000µg/ml	250ml
PV4B18	15% HCl	10,000µg/ml	250ml
<b>Ytterbium</b>			
PYb2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PYb2A2		1,000µg/ml	100ml
PYb4B2		10,000µg/ml	250ml
<b>Yttrium</b>			
PY2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PY2A2		1,000µg/ml	100ml
PY4B2		10,000µg/ml	250ml
<b>Zinc</b>			
PZn2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PZn2A2		1,000µg/ml	100ml
PZn4B2		10,000µg/ml	250ml
PZn2B3	2-5% HCl	1,000µg/ml	250ml
PZn4B3		10,000µg/ml	250ml
<b>Zirconium</b>			
PZr2B2	2-5% HNO <sub>3</sub>	1,000µg/ml	250ml
PZr2A2		1,000µg/ml	100ml
PZr4B2		10,000µg/ml	250ml
PZr2B8	10% HCl	1,000µg/ml	250ml
<b>MATRIX BLANKS</b>			
MATHN05	5% HNO <sub>3</sub> in ASTM Type 1 Water		500ml
MATHN01			1L
MATHCL5	5% HCl in ASTM Type 1 Water		500ml
MATHCL1			1L
MATH205	ASTM Type 1 Water)		500ml
MATH201			1L
MATMIX15	Mixed acid - 5% HCl		500ml
MATMIX11	and 1% HNO <sub>3</sub> in ASTM Type 1 Water		1L

**MULTI ELEMENT STANDARDS FOR PLASMA EMISSION SPECTROSCOPY**

**CUSTOMISED FOR EVERY APPLICATION**

As a spectroscopist you may be faced with many problems when making trace element determinations.

These problems include:

- Presence of more than one major sample constituents
- Inter element interferences
- Matrix effects

These problems and others are exacerbated as you strive for greater reproducibility, sensitivity and specificity. Reagecon can help you remove some of these variables with our new range of comprehensive multi-element standards.

We will be happy to look at:

- Which elements you would like to combine
- Concentrations
- Matrices

Depending on concentration and interferences, all of over 70 elements listed on previous pages, can be combined into customised cocktails, containing up to 30 individual elements depending on inter-element compatibility, solubility and matrix considerations.

The elements in Reagecon multi-element standards can be present in widely varying concentrations and utilise the same ultra-pure raw materials. Please contact sales@reagecon.ie for further information.



## INORGANIC SPECTROSCOPY STANDARDS

### MULTI-ELEMENT STANDARDS FOR ICP

19 ELEMENTS IN 2-5% HNO<sub>3</sub> PACK SIZE:100ml

Product No	Elements	ppm
ICP19A10	Al (Aluminium)	100
	Ba (Barium)	5
	B (Beryllium)	1
	Bi (Bismuth)	200
	B (Boron)	15
	Cd (Cadmium)	20
	Cr (Chromium)	25
	Co (Cobalt)	20
	Cu (Copper)	30
	Ga (Gallium)	150
	In (Indium)	200
	Fe (Iron)	15
	Pb (Lead)	200
	Mn (Manganese)	5
	Ni (Nickel)	50
	Ag (Silver)	50
	Sr (Strontium)	1
	Tl (Thallium)	40
	Zn (Zinc)	20

3 Elements in 2-5% HNO<sub>3</sub> PACK SIZE:100ml

Product No	Elements	ppm
ICP3A2	Li (Lithium)	250
	K (Potassium)	10,000
	Na (Sodium)	1,000

4 Elements in 2-5% HNO<sub>3</sub> PACK SIZE:100ml

Product No	Elements	ppm
ICP4A2	Ba (Barium)	1,000
	Ca (Calcium)	1,000
	Mg (Magnesium)	1,000
	Sr (Strontium)	1,000

All of the above multi-element mixtures can be used either as standards or controls.

$$1 \mu\text{g/ml} = 1 \text{mg/l} = 1\text{ppm} = 1,000\text{ppb}$$

### MULTI-ELEMENT STANDARDS FOR ICP

23 ELEMENTS IN 2-5% HNO<sub>3</sub> & 0.2% HF  
PACK SIZE:100ml

Product No	Elements	ppm
ICP23A20	Sb (Antimony)	100
	As (Arsenic)	100
	Be (Beryllium)	100
	Cd (Cadmium)	100
	Ca (Calcium)	100
	Cr (Chromium)	100
	Co (Cobalt)	100
	Cu (Copper)	100
	Fe (Iron)	100
	Pb (Lead)	100
	Li (Lithium)	100
	Mg (Magnesium)	100
	Mn (Manganese)	100
	Mo (Molybdenum)	100
	Ni (Nickel)	100
	P (Phosphorus)	100
	Se (Selenium)	100
	Sr (Strontium)	100
	Tl (Thallium)	100
	Sn (Tin)	100
	Ti (Titanium)	100
	V (Vanadium)	100
	Zn (Zinc)	100

7 ELEMENTS IN 2-5% HNO<sub>3</sub> & 0.2% HF

PACK SIZE:100ml

Product No	Elements	ppm
ICP7A20	Al (Aluminium)	100
	Ba (Barium)	100
	B (Boron)	100
	K (Potassium)	1,000
	Si (Silicon)	500
	Ag (Silver)	50
	Na (Sodium)	100

7 ELEMENTS IN 2-5% HNO<sub>3</sub> & 0.2% HF

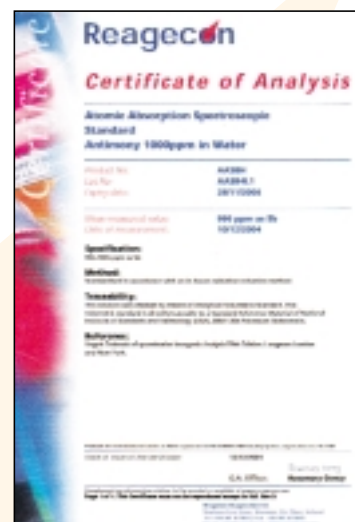
PACK SIZE:100ml

Product No	Elements	ppm
ICP19A10	Al (Aluminium)	100
	Ba (Barium)	100
	Cd (Cadmium)	100
	Ca (Calcium)	100
	Cr (Chromium)	100
	Co (Cobalt)	100
	Cu (Copper)	100
	Fe (Iron)	100
	Pb (Lead)	100
	Mg (Magnesium)	100
	Mn (Manganese)	100
	Ni (Nickel)	100
	Na (Sodium)	100
	Ti (Titanium)	100
	Zn (Zinc)	100

## INORGANIC SPECTROSCOPY STANDARDS

### ATOMIC ABSORPTION STANDARDS

The range of aqueous AA Standards available from Reagecon are listed below. These include standards for the measurement of all the most common alkali and transition metals. Pack size is 500ml



Product No.	Description	Concentration	Matrix	Pack Size
AAALH	ALUMINIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AAALM	ALUMINIUM	10000ppm	1M HNO <sub>3</sub>	500ml
AASbH	ANTIMONY	1000ppm	H <sub>2</sub> O	500ml
AASbM	ANTIMONY	10000ppm	H <sub>2</sub> O	500ml
AAAsH	ARSENIC (III)	1000ppm	1M HCl	500ml
AAAsM	ARSENIC (III)	10000ppm	1M HCl	500ml
AAAsVH	ARSENIC (V)	1000ppm	1M HNO <sub>3</sub>	500ml
AAAsVM	ARSENIC (V)	10000ppm	1M HNO <sub>3</sub>	500ml
AABaH	BARIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AABaM	BARIUM	10000ppm	1M HNO <sub>3</sub>	500ml
AABeH	BERYLLIUM	1000ppm	1M HCl	500ml
AABeM	BERYLLIUM	10000ppm	1M HCl	500ml
AABiH	BISMUTH	1000ppm	0.5M HNO <sub>3</sub>	500ml
AABiM	BISMUTH	10000ppm	1M HNO <sub>3</sub>	500ml
AAB-H	BORON	1000ppm	H <sub>2</sub> O	500ml
AAB-M	BORON	10000ppm	H <sub>2</sub> O	500ml
AACdH	CADMIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AACdM	CADMIUM	10000ppm	1M HNO <sub>3</sub>	500ml
AACaH	CALCIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AACaM	CALCIUM	10000ppm	1M HNO <sub>3</sub>	500ml
AACsH	CESIUM	1000ppm	1M HNO <sub>3</sub>	500ml
AACsM	CESIUM	10000ppm	1M HNO <sub>3</sub>	500ml
AACrH	CHROMIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AACrM	CHROMIUM	10000ppm	1M HNO <sub>3</sub>	500ml
AACoH	COBALT	1000ppm	0.5M HNO <sub>3</sub>	500ml
AACoM	COBALT	10000ppm	1M HNO <sub>3</sub>	500ml
AACuH	COPPER	1000ppm	0.5M HNO <sub>3</sub>	500ml
AACuM	COPPER	10000ppm	1M HNO <sub>3</sub>	500ml
AAGdH	GADOLINIUM	1000ppm	1M HCl	500ml
AAGdM	GADOLINIUM	10000ppm	1M HCl	500ml
AAGaH	GALLIUM	1000ppm	1M HCl	500ml
AAGaM	GALLIUM	10000ppm	1M HCl	500ml
AAAuH	GOLD	1000ppm	2M HCl	500ml
AAAuM	GOLD	10000ppm	2M HCl	500ml
AAInH	INDIUM	1000ppm	1M HNO <sub>3</sub>	500ml
AAInM	INDIUM	10000ppm	1M HNO <sub>3</sub>	500ml

**INORGANIC SPECTROSCOPY STANDARDS**
**ATOMIC ABSORPTION STANDARDS (CONTINUED)**

Product No.	Description	Concentration	Matrix	Pack Size
AAIrH	IRIDIUM	1000ppm	10% HCl	500ml
AAIrM		10000ppm	10% HCl	500ml
AAFeH	IRON	1000ppm	0.5M HNO <sub>3</sub>	500ml
AAFeM		10000ppm	1M HNO <sub>3</sub>	500ml
AALaH	LANTHANUM	1000ppm	1M HNO <sub>3</sub>	500ml
AALaM		10000ppm	1M HNO <sub>3</sub>	500ml
AAPbH	LEAD	1000ppm	0.5M HNO <sub>3</sub>	500ml
AAPbM		10000ppm	1M HNO <sub>3</sub>	500ml
AALiH	LITHIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AALiM		10000ppm	1M HNO <sub>3</sub>	500ml
AAMgH	MAGNESIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AAMgM		10000ppm	1M HNO <sub>3</sub>	500ml
AAMnH	MANGANESE	1000ppm	1M HCl	500ml
AAMnM		10000ppm	1M HCl	500ml
AAHgH	MERCURY	1000ppm	0.5M HNO <sub>3</sub>	500ml
AAHgM		10000ppm	1M HNO <sub>3</sub>	500ml
AAMoH	MOLYBDENUM	1000ppm	H <sub>2</sub> O	500ml
AAMoM		10000ppm	H <sub>2</sub> O	500ml
AANiH	NICKEL	1000ppm	0.5M HNO <sub>3</sub>	500ml
AANiM		10000ppm	1M HNO <sub>3</sub>	500ml
AAPdH	PALLADIUM	1000ppm	1M HCl	500ml
AAPdM		10000ppm	1M HCl	500ml
AAP-H	PHOSPHORUS	1000ppm	H <sub>2</sub> O	500ml
AAP-M		10000ppm	H <sub>2</sub> O	500ml
AAPtH	PLATINUM	1000ppm	1M HCl	500ml
AAPtM		10000ppm	1M HCl	500ml
AAK-H	POTASSIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AAK-M		10000ppm	1M HNO <sub>3</sub>	500ml
AARhH	RHODIUM	1000ppm	1M HNO <sub>3</sub>	500ml
AARhM		10000ppm	1M HNO <sub>3</sub>	500ml
AASeH	SELENIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AASeM		10000ppm	1M HNO <sub>3</sub>	500ml
AASiH	SILICON	1000ppm	H <sub>2</sub> O	500ml
AASiM		10000ppm	H <sub>2</sub> O	500ml
AAAgh	SILVER	1000ppm	0.5M HNO <sub>3</sub>	500ml
AAAghM		10000ppm	1M HNO <sub>3</sub>	500ml
AANaH	SODIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AANaM		10000ppm	1M HNO <sub>3</sub>	500ml
AASrH	STRONTIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AASrM		10000ppm	1M HNO <sub>3</sub>	500ml
AAS-H	SULPHUR	1000ppm	H <sub>2</sub> O	500ml
AAS-M		10000ppm	H <sub>2</sub> O	500ml
AATeH	TELLURIUM	1000ppm	1M HCl	500ml
AATeM		10000ppm	1M HCl	500ml
AATiH	THALLIUM	1000ppm	1M HNO <sub>3</sub>	500ml
AATiM		10000ppm	1M HNO <sub>3</sub>	500ml
AATtH	THORIUM	1000ppm	1M HNO <sub>3</sub>	500ml
AATtM		10000ppm	1M HNO <sub>3</sub>	500ml
AASnH	TIN	1000ppm	1M HCl	500ml
AASnM		10000ppm	1M HCl	500ml

## INORGANIC SPECTROSCOPY STANDARDS

### ATOMIC ABSORPTION STANDARDS (CONTINUED)

Product No.	Description	Concentration	Matrix	Pack Size
AATiH	TITANIUM	1000ppm	H <sub>2</sub> O	500ml
AATiM		10000ppm	H <sub>2</sub> O	500ml
AAW-H	TUNGSTEN	1000ppm	H <sub>2</sub> O	500ml
AAW-M		10000ppm	H <sub>2</sub> O	500ml
AAU-H	URANIUM	1000ppm	1M HNO <sub>3</sub>	500ml
AAU-M		10000ppm	1M HNO <sub>3</sub>	500ml
AAV-H	VANADIUM	1000ppm	0.5M HNO <sub>3</sub>	500ml
AAV-M		10000ppm	1M HNO <sub>3</sub>	500ml
AAZnH	ZINC	1000ppm	0.5M HNO <sub>3</sub>	500ml
AAZnM		10000ppm	1M HNO <sub>3</sub>	500ml
AAZrH	ZIRCONIUM	1000ppm	1M HCl	500ml
AAXrM		10000ppm	1M HCl	500ml

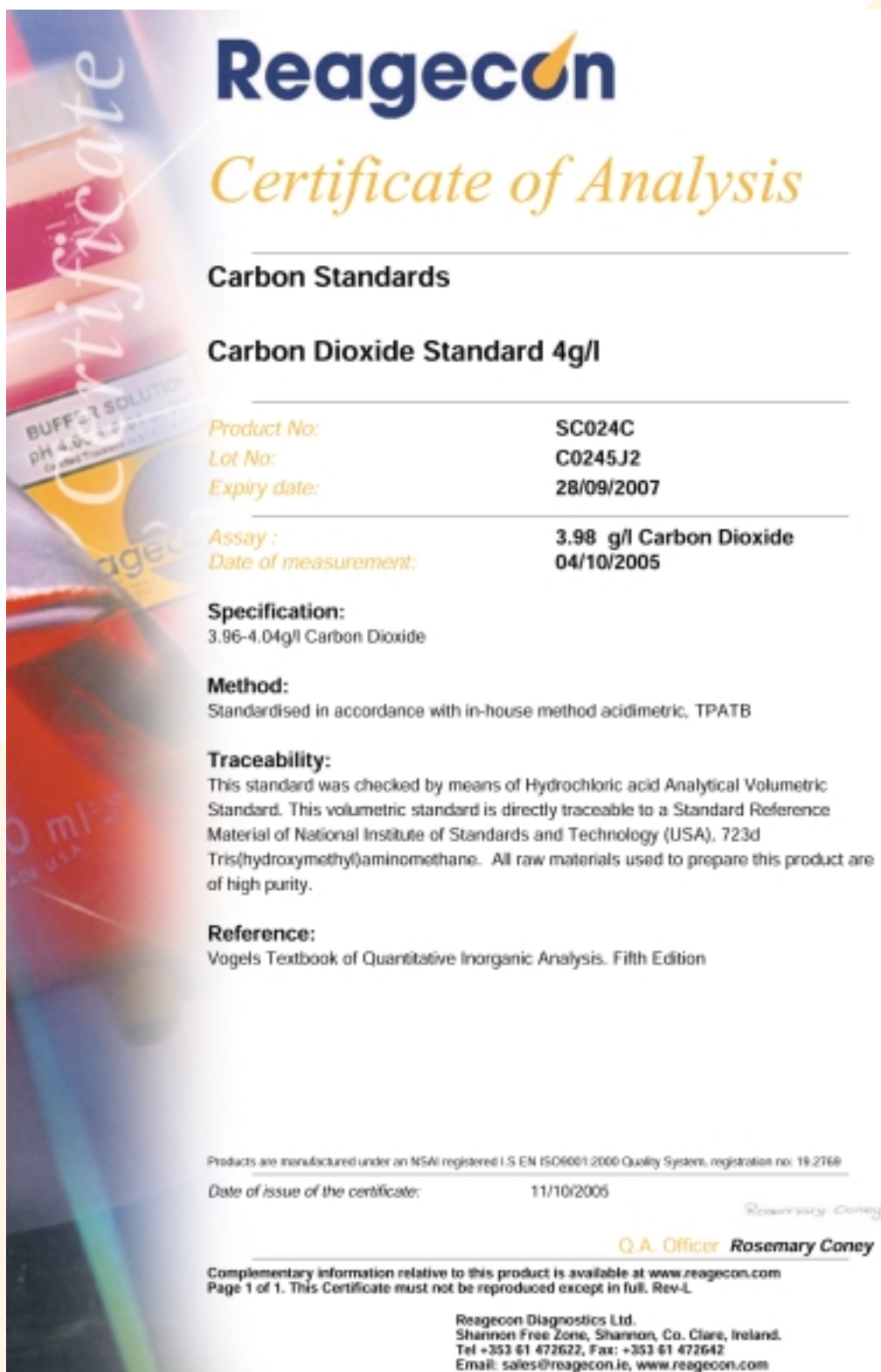
### MATRIX MODIFIER SOLUTIONS FOR GRAPHITE FURNACE AA

Product No.	Description	Starting Material	Pack Size
MMS101	Ammonium dihydrogen phosphate sol. 40% in H <sub>2</sub> O	NH <sub>4</sub> H <sub>2</sub> PO <sub>2</sub>	100ml
MMS105			500ml
MMS201	Ammonium nitrate sol, 2% in H <sub>2</sub> O	NH <sub>4</sub> NO <sub>3</sub>	100ml
MMS205			500ml
MMS301	Calcium nitrate sol., 2% Ca in 5% in HNO <sub>3</sub>	Ca(NO <sub>3</sub> ) <sub>2</sub> ·4H <sub>2</sub> O	100ml
MMS305			500ml
MMS401	Lanthanum chloride sol., 5% La in 5% HCl	LaCl	100ml
MMS405			500ml
MMS501	Lanthanum nitrate sol., 5% La in 5% HNO <sub>3</sub>	La <sub>2</sub> O <sub>3</sub>	100ml
MMS505			500ml
MMS601	Magnesium nitrate sol, 2% Mg in 5% HNO <sub>3</sub>	Mg	100ml
MMS605			500ml
MMS701	Nickel nitrate solution, 5% Ni in 5% HNO <sub>3</sub>	Ni	100ml
MMS705			500ml
MMS801	Palladium nitrate solution, 0.2% Pd in 5% HNO <sub>3</sub>	Pd(NO <sub>3</sub> ) <sub>2</sub>	100ml
MMS805			500ml
MMS901	Palladium nitrate solution, 1.0% Pd in 5% HNO <sub>3</sub>	Pd(NO <sub>3</sub> ) <sub>2</sub>	100ml
MMS905			500ml
MMS1001	Palladium nitrate solution, 2.0% Pd in 10% HNO <sub>3</sub>	Pd(NO <sub>3</sub> ) <sub>2</sub>	100ml
MMS1005			500ml

### RELEASING AGENTS FOR ATOMIC ABSORPTION

Releasing agents eliminate the chemical interference from ligands that complex with the analyte thereby altering the free atom population in the flame.

Product No.	Description	Pack Size
RA1N05	1.0% Lanthanum in HNO <sub>3</sub>	500ml
RA1C05	1.0% Lanthanum in HCl	500ml
RA5N05	5.0% Lanthanum in HNO <sub>3</sub>	500ml
RA5C05	5.0% Lanthanum in HCl	500ml



**Reagecon**  
*Certificate of Analysis*

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**Carbon Standards**

**Carbon Dioxide Standard 4g/l**

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<i>Product No:</i>	<b>SC024C</b>
<i>Lot No:</i>	<b>C0245J2</b>
<i>Expiry date:</i>	<b>28/09/2007</b>

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<i>Assay :</i>	<b>3.98 g/l Carbon Dioxide</b>
<i>Date of measurement:</i>	<b>04/10/2005</b>

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**Specification:**  
 3.96-4.04g/l Carbon Dioxide

**Method:**  
 Standardised in accordance with in-house method acidimetric, TPATB

**Traceability:**  
 This standard was checked by means of Hydrochloric acid Analytical Volumetric Standard. This volumetric standard is directly traceable to a Standard Reference Material of National Institute of Standards and Technology (USA), 723d Tris(hydroxymethyl)aminomethane. All raw materials used to prepare this product are of high purity.

**Reference:**  
 Vogels Textbook of Quantitative Inorganic Analysis. Fifth Edition

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Products are manufactured under an ISO registered I.S EN ISO9001:2000 Quality System, registration no: 18-2168

Date of issue of the certificate: 11/10/2005

Rosemary Coney  
**Q.A. Officer Rosemary Coney**

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Complementary information relative to this product is available at [www.reagecon.com](http://www.reagecon.com)  
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