HIGH PURITY SWAB KIT FOR IN SITU COLLECTION

OF SURFACE TRACE METALS ON TOOL COMPONENTS OR CRITICAL SURFACES

Controlled Liquid Phase Extraction™ ICP-MS is a well-developed direct extraction technique for surface trace metal analysis of chamber parts. However, for parts that are too fragile and large to transport, customers have come to rely on ChemTrace High Purity Swab Kit for in-situ collection of trace metals to validate parts cleanliness. Swabs with collected trace metal impurities are then shipped to ChemTrace labs for analysis by ICP-MS.

CHEMTRACE SWAB KIT INCLUDES

- Shipping Box
- Pre-cleaned, qualified & pre-saturated swab in pre-cleaned tubes
- Sampling instructions
- Analytical Service Request form
- Return address label

ADVANTAGES OVER WIPE METHOD

- Swab is not in direct contact with glove during sampling which reduces trace metal contamination

CAPABILITIES

- 30 plus trace elements
- High sensitivities
- Suitable for all substrates/coatings
- Ideal for sampling of surfaces regardless of orientation

TRACE METAL ANALYSIS OF A QUARTZ FURNACE TUBE AT 4 DIFFERENT LOCATIONS

Element		Method Detection Limit	Control Swab	Location 1	Location 2	Location 3	Location 4
Aluminum	(Al)	50	<50	550	490	490	350
Calcium	(Ca)	70	<70	14,000	660	2,500	570
Chronium	(Cr)	20	<20	<20	<20	<20	<20
Cobalt	(Co)	5	<5	<5	<5	<5	<5
Copper	(Cu)	2	<2	15	2.5	3.7	<20
Iron	(Fe)	20	<20	37	<20	<20	<20
Lithium	(Li)	20	<20	<20	<20	<20	<20
Magnesium	(Mg)	50	<50	830	1,200	950	600
Manganese	(Mn)	5	<5	<5	<5	<5	<5
Molybdenum	(Mo)	1	<1	<1	<1	<1	<1
Nickle	(Ni)	10	<10	<10	<10	<10	<10
Potassium	(K)	50	110	1,200	900	920	870
Sodium	(Na)	50	<50	1,300	350	490	510
Zinc	(Zn)	20	<20	130	26	<20	<20

**Surface Concentration (x 10^{10} atoms/cm^2)*

contact us at Info@ChemTrace.com