The demand for trace metals analysis at lower and lower levels continues to increase, driven by new regulations, fundamental research and also by industry. Analytical instrumentation, principally ICP-MS, continues to develop and improve, placing further demands on sample preparation, since trace metals data quality is only as good as the quality of the sample preparation step.

In response, Savillex has developed a clean sample prep line, featuring a range of products that lower the prep blank and improve analytical data. Manufactured from the highest purity grade of PFA, the Savillex clean sample prep line provides ultraclean solutions for digestion, evaporation, ion exchange, cleaning, storage and more. And our renowned DST acid purification systems make it affordable to use ultrapure acid for sample digestion and even cleaning. With the Savillex clean sample prep range, sample prep is no longer the limiting step.
> **Acid Purification**

From the world leader in acid purification systems. Savillex’s DST acid purification systems provide the easiest and most cost-effective way to produce high purity acid on demand for use with ICP-MS and other metals analysis techniques. Starting with low cost trace metal grade acid, the DST-1000 can produce 500 mL of high purity HNO₃, HCl or HF in approximately 12 hours, while the higher capacity, automated DST-4000 can produce twice that amount in the same time period. Depending upon the lab’s acid needs, these units can pay for themselves in as little as a few months or even weeks.

> **Hotplates**

Finally – an inert hotplate clean enough to be used for the most demanding ICP-MS sample prep. The HPX Series of inert hotplates are designed for use in the most challenging ultratrace applications. Manufactured from low porosity ISO-molded graphite with a Teflon™ PFA coating, HPX hotplates provide outstanding temperature uniformity, safe operation, and are third party CE tested. HPX hotplates are available in two sizes: HPX-100 and the larger HPX-200. Both include a digital PID controller, PTFE side guards and underside heat protection and are fully user serviceable. They are available in a range of voltages and most versions are capable of heating to 240°C. PFA coated heating blocks increase evaporation rate and are available for all common vial sizes.
Vials
Savillex PFA vials – the gold standard in geochemical sample digestion. For over 40 years, Savillex PFA vials have been the choice of geochemists worldwide for sample digestion and evaporation, and are referenced in literally hundreds of peer reviewed papers. Molded from the highest purity grade of virgin PFA, they are chemically inert, with ultra low trace metal content, while the flat bottom and wide service temperature range makes them perfect for use with the HPX Series hotplate.

Cleaning Systems
Eliminate sample carryover with the ultimate cleaning system for vials. Molded from high purity PFA, the vial cleaning system is the safest and most efficient method for cleaning PFA vials used for sample digestion, and is a superior, unbreakable alternative to glass beakers traditionally used for bulk cleaning PFA labware. It is designed to be used in conjunction with the vial rack system, which comprises of a series of grid-type racks to hold parts securely in place for effective bulk cleaning and easy handling. Pre-configured systems accommodate the most popular Savillex vial sizes, and custom systems can be configured to handle a wide variety of labware products.
> **Microcolumns**

The cleanest microcolumns for matrix removal. Savillex PFA microcolumns are used to perform ion-exchange sample preparation in geochemistry, and are available in a variety of reservoir and column combinations. Threaded microcolumns can also be used with a closure for prevention of airborne contamination. Microcolumns in custom sizes are also available.

> **Digestion Vessels & Tubes**

More options for clean sample digestion. Savillex digestion vessels are designed for the increasingly aggressive digestion preparation methods used in trace analytical procedures. These molded PFA digestion vessels feature ultra low metals content and are compatible with all mineral acids. Digestion vessels with flat exteriors can be used on the HPX hotplate. Our PFA block digestion tubes are the cleanest and highest performing block digestion tubes available. Molded from high purity virgin PFA, and with a working temperature range up to 260°C, these block digestion tubes can be used for all high temperature block digestion methods.
In addition to our clean sample prep line of products, Savillex also offers product solutions for:

- **SAMPLE COLLECTION**
- **ICP SAMPLE INTRODUCTION**
- **LABORATORY**
- **BIOPHARMA**
- **FILTRATION**
- **CUSTOM MOLDING**

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