PFAS Destruction - AFFF

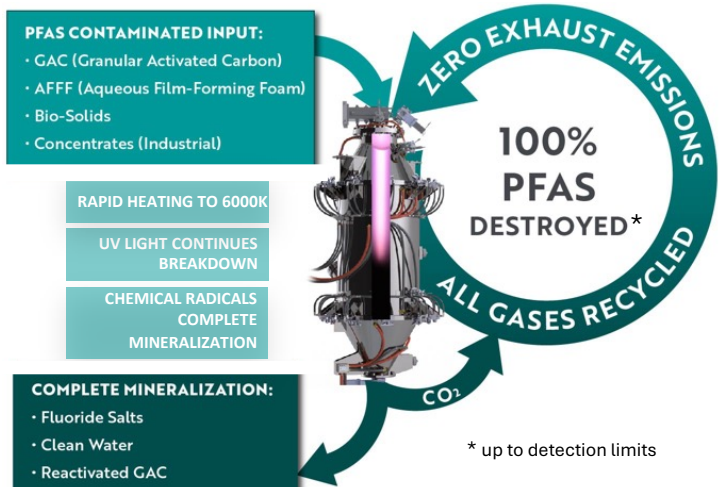
Closed Loop Microwave Plasma System

TAKING AIM AT SOLVING THE TOXIC "FOREVER CHEMICAL" PROBLEM

6K Pure uses the UniMelt advanced material process engine for the industry's first complete per- and polyfluoroalkyl (PFAS) destruction and remediation solution. Utilizing the 6000K UniMelt plasma, 6K Pure can destroy PFAS also known as the "forever chemical" that is found in drinking water, AFFF firefighting foam and wastewater from industrial manufacturing processes. The chemical's carbon-fluorine bond is one of the strongest, making them almost impossible to destroy – until now.

The ability to accept all three states of matter to destroy PFAS, including solid, liquid, or gas, allows the UniMelt platform to be applied across a variety of applications - water purification, wastewater treatment of biosolids, industrial manufacturing, AFFF and air emissions. In addition to destroying PFAS, the UniMelt has a unique capability to reactivate granular activated carbon (GAC) commonly used to absorb organic compounds like PFAS in drinking water treatment systems. The ability to reactivate GAC provides producers and water municipalities with an environmentally friendly and proven way to address PFAS, while also recirculating a high-value filter material back into the system - reducing the need to produce virgin GAC and further reducing their carbon footprint.

THERMAL PLASMA is hot enough to break down stable PFAS molecules in just SECONDS



* up to detection limits

Remediate 100% of PFAS chemicals back into non-hazardous, high-value products

- ✓ Complete destruction of long and short-chain carbon-fluorine molecules
- ✓ All PFAS media – solid, liquid and gas
- ✓ Ultra-fast with PFAS destruction in 2 seconds
- ✓ Low-cost operation
- ✓ Flexible and agile deployment (6K centralized, on-site or mobile)
- ✓ Inherently safe process running at atmospheric pressure with low thermal mass
- ✓ Zero emissions with our closed-loop process

Notable Attributes

Closed loop, continuous process

Scalable and highly modular

All material types
Solids, Liquids and Gases

Up to high concentrations

Reactivates spent carbon

Primary Markets Addressed

Water Filtration

Firefighting Foam

Manufacturing Waste

Complete PFAS Destruction in Liquid Concentrates

With NO Environmental Exhaust

6K PURE

ANALYTICAL RESULTS FOR ONE PASS ONLY

Residuals addressed by closed loop process

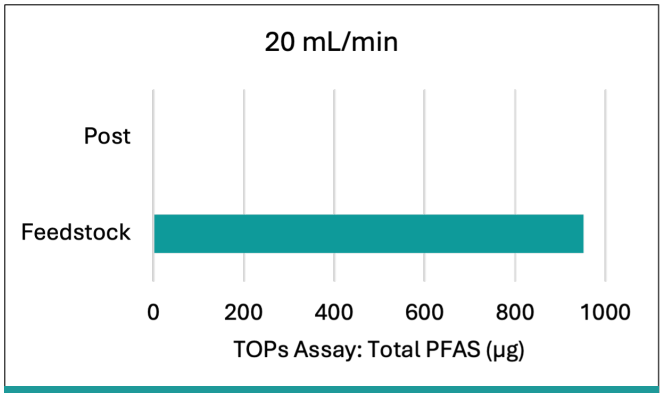
Liquids: AFFF PFAS Destruction

AFFF (Aqueous film-forming foam) samples from local **Fire Departments**

- **TOPs Assay** testing to measure PFAS & Precursors
- **Total Organic Fluorine** testing to measure all organic fluorine

Liquid concentrates = AFFF, industrial manufacturing & chemical waste
Upcycling of Fluorine potential

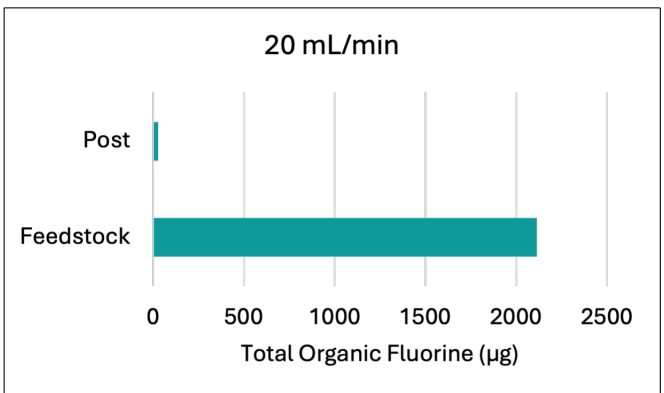
TOPs Assay: PFAS & PFAS Precursor Destruction



99.93% Destruction

Pace

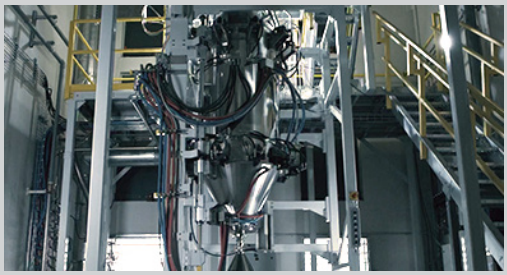
Total Organic Fluorine: PFAS Destruction



98.90% Destruction

BUREAU VERITAS

Scaled UniMelt Manufacturing



System Specifications

- ✓ Small Footprint 20' x 20'
- ✓ Power Requirements of 480V
- ✓ No Moving Parts
- ✓ Ultra-Fast / Ultra-Clean - 2 Second Process
- ✓ Low/No Production Waste
- ✓ Continuous Process and Batch Integrity

Deployment Options

MOBILE UNITS
Scaled to Need
Demonstration & short duration projects

STATIONARY UNITS
High Capacity
Dedicated system(s) located at source

Rate of up to 130 gallons per day

6KPure.com

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