

Total Sample Preparation Workflow

For Organic Pollutants Analysis



MILESTONE
HELPING
CHEMISTS



ENVIRONMENTAL



OPTIMIZE YOUR ORGANIC ANALYSES
BY USING A TOTAL SAMPLE PREP
WORKFLOW APPROACH

| TOTAL SAMPLE PREP WORKFLOW

Analyzing organic pollutants in soils and like matrices for PCBs, pesticides and semivolatile organics, demands meticulous sample preparation, where each step can impact productivity, costs, and analysis quality if not properly optimized. The Total Sample Prep Workflow approach for organic pollutants analysis introduces a tailored suite of tools addressing reagent handling, extraction, filtration, and cleaning. By adopting these tools, labs gain enhanced efficiency, improved safety, reduced analyst time, and overall reduction in operating costs.



COSTS



QUALITY



EFFICIENCY



SAFETY

ELEVATE CONSISTENCY EFFICIENCY, QUALITY, & SAFETY IN ENVIRONMENTAL ANALYSIS



I AUTOMATION IN SOLVENT HANDLING

In routine organic pollutant analysis, adding solvent mixtures raises safety concerns and consumes valuable time. Automating solvent addition not only frees up analysts for more productive tasks but also eliminates risks associated with solvent exposure, reduces errors, and ensures a smoother, safer workflow involving solvents like methylene chloride, hexane, and acetone.

I MICROWAVE EXTRACTION

Traditional extraction methods (sonication, Soxhlet, pressurized fluid extraction) present safety, quality, and cost challenges for environmental labs. Microwave-assisted extraction revolutionizes organic analysis (EPA SW-846 method 3546) with a cost-effective, safe approach. Using 100-mL disposable glass vials streamlines handling, eliminates cleaning, achieves low detection limits, and enhances productivity—reducing operator time, accommodating workloads, and improving turnaround time.

I FILTRATION

After extraction, the filtrate undergoes filtration through anhydrous sodium sulfate. Traditional gravity filtration methods are space-consuming and filter one sample at a time. Milestone's compact filtration system is ergonomic, vacuum-filtering up to 24 samples simultaneously, saving space and expediting the process. Disposable reservoirs prevent carry-over and eliminate cleaning steps. Rack configurations are compatible with most commercial concentrators in the market.

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