

# prepFAST CARBON

## Automated analysis of semiconductor-grade chemicals for organic contamination

prepFAST CARBON detects and identifies organic contaminants into the ppt range in ultrapure chemicals used in the semiconductor industry. Organic contaminants can negatively affect productivity and yield if undetected.



## Organic Contaminant Analyzer

- Quantitative analysis of targeted organic contaminants in inorganic and organic chemicals
- Identification and semi-quantification of non-targeted compounds
- Applicable for all semiconductor grade solvents and chemicals
- ppt range detection
- Ultra-high mass resolution TOF-MS and QTOF-MS detector options

## High-throughput Fully Automated System

- Accurate determination and compound identification
- Autodilution
- Autocalibration
- Automated vial and bottle uncapping

## Ease of Use

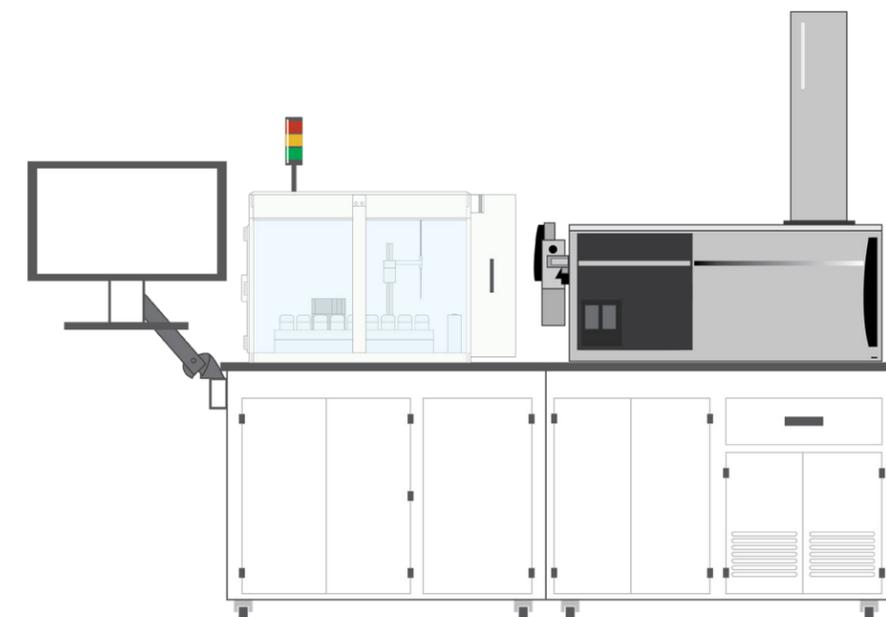
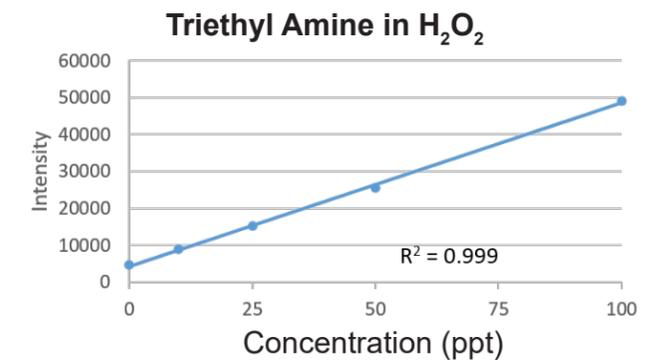
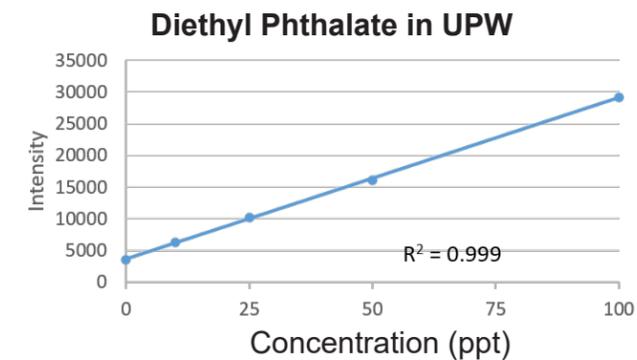
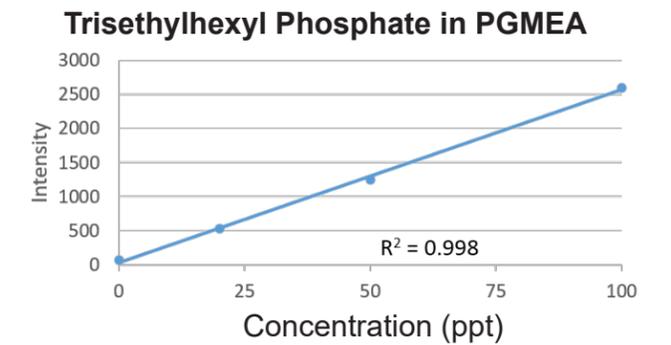
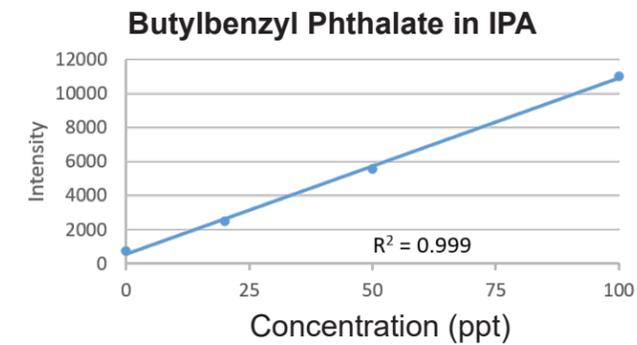
- Barcode scanning
- Eliminates the need for chromatographic separations
- Easy-to-use software with built-in dynamic library option

### Importance of Monitoring & Controlling Organic Contaminants

Organic contamination in process chemicals can cause a myriad of issues stemming from changes to the silicon wafer including:

Changes in wettability/hydrophobicity; Unintentional doping of the wafer; Gate-oxide degradation; Variation in topology across the wafer; Surface haze; pH change

## Autocalibration of Potential Contaminants





© Elemental Scientific | 7277 World Communications Drive | Omaha, NE 68122  
Tel: 1-402-991-7800 | [sales@icpms.com](mailto:sales@icpms.com) | [www.icpms.com](http://www.icpms.com)

B-22201