

The TurboTox™ GC/MS Productivity Solution is the intelligent choice for workplace drug testing laboratories. The TurboTox Productivity Solution ensures lowest cost per test, with maximum uptime and unsurpassed linearity, precision, and performance. Combine fast sample analysis with intelligent sequencing to realize optimum productivity.

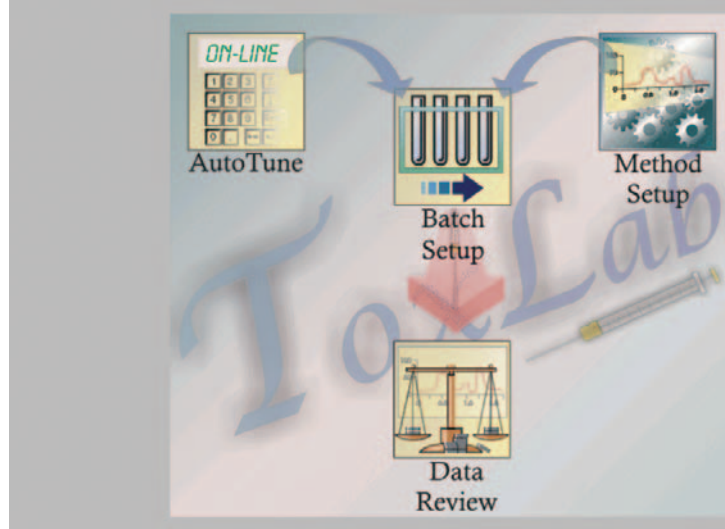
## TurboTox GC/MS Productivity Solution

Value, Performance and Ease of Use



### TurboTox Productivity Solution

The TurboTox GC/MS Productivity Solution integrates the GC/MS hardware system with the software, methods and consumables to provide a complete solution for integrating the DSQ™ II GC/MS system into existing workflows in the busy toxicology laboratory.



### Maximize Sample Throughput

Methods designed to take advantage of the DSQ II system's extended dynamic range and the TRACE GC Ultra's fast heating and cooling ensure optimal sample throughput with fewer repeats and re-extractions.

### Intelligent Sequencing

ToxLab™ 2.0 automates batch acquisition and reporting, offering unsurpassed intelligent sequencing. ToxLab 2.0 continuously monitors sequences as they progress and modifies batches in real time – preventing carryover, resolving ion ratios, checking peak symmetry, and more. Realize potential cost savings of an average of \$25,000 per year per GC/MS system by incorporating ToxLab and the DSQ II GC/MS into your lab.<sup>1</sup>

### Pre-Qualified Performance

The TurboTox Productivity Solution covers GC/MS confirmation methods for five drug classes as specified in the US Substance Abuse and Mental Health Services Administration (SAMHSA) workplace drug testing program. These methods were fully validated in urine matrix, including linearity, precision, and specificity to ensure compliance with accepted practices.

### Streamlined Integration

A complete set of manuals and guides takes users through basic and advanced operation of the system. Training is straight-forward and standardized from user to user.

Designed for use with the Thermo Scientific DSQ II mass spectrometer, the TurboTox Productivity Solution includes a complete set of software, manuals, methods, and consumables designed to work together to provide optimum performance. The TurboTox Productivity Solution streamlines integration of the DSQ II GC/MS system into daily operations and ensures high sample throughput. For more detailed information, please visit [www.thermo.com/fotox](http://www.thermo.com/fotox).

## Reference

1. *ToxLab 2.0: Evaluation of Intelligent Sequencing Software for Use in High-Throughput Laboratory Settings*. Thermo Fisher Scientific Application Note AN10108.

## TurboTox GC/MS Productivity Solution

### Manuals, Software and Guides

ToxLab 2.0	Intelligent sequencing acquisition and reporting software automates sample analysis and reporting, with real-time batch decision making.
Standard Operating Procedure (SOP)	Hard copy of comprehensive Standard Operating Procedures for the method and the instruments
Quick Start Guide	Hard copy of 6-page, 11" X 17", Quick Start Guide for easy start-up and training
Quick Reference CD	Electronic versions of hardcopy manuals, methods and batch templates simplify start-up
Validation Data CD	Comprehensive set of data and reports represents factory validation of method performance

### High Performance Thermo Scientific Consumables

Deactivated Glass Wool	Extends column and liner lifetimes by trapping non-volatile contaminants while providing inertness for wide range of active compounds
Column Ferrules for Inlet	Ensure leak free injection port connections
Analytical Columns	TRACE™ TR-DOA35 15 m x 0.20 mm ID x 0.33 µm film and TRACE TR-5MS 15 m x 0.25 mm ID x 0.25 µm (included with DSQ II system) offer optimal performance across wide compound ranges
Inlet Septa	BTO septa with minimal bleed and excellent high temperature performance
Liner Seal, Graphite	Ensures leak-free injection port
Injection Port Liner	5 mm ID deactivated liners offer excellent performance and inertness
Transfer Line Ferrules	Ensure leak free connection at transfer line to mass spectrometer
Autosampler Vials and Inserts	2 mL amber vials, inserts and lids with PTFE red rubber septa minimize bleed and maintain sample integrity
10 µL Gas-tight Syringe	Precise sample introduction for optimal reproducibility and minimal carryover

### Pre-Developed Instrument and Processing Methods

Pre-Validated Methods	Five rigorously validated methods for each drug class optimize throughput and reduce cost per sample
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Drug Class	Derivative	Linear Range (Limit of Detection to Upper limit of Linearity) ng/mL	Retention Time (min)	Technical Note Reference #
THC Metabolite (11-nor-9-carboxy-Δ-9-THC)	BSTFA	1.5-1000	1.72	TN10161
Phencyclidine (PCP)	None	5.0-5000	1.77	TN10163
Cocaine Metabolite (benzoylecgonine)	PFFA/HFIP	15.0-12,500	1.13	TN10168
Amphetamine (AM) Methamphetamine (MA)	4-CB	25.0-50,000 (AM) 25.0-25,000 (MA)	2.48 (AM) & 3.32 (MA)	TN10176
Codeine (Cod) Morphine (Mor)	Acetyl	60.0-50,000 (Cod) 100-50,000 (Mor)	2.76 (Cod) & 3.57 (Mor)	TN10178

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PS10165\_E 05/07M

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