

# TruDefender | FT

Handheld Unknown Chemical Identification



**TruDefender™ FT** is a rugged, handheld FTIR system for rapid, in-the-field identification of unknown chemicals. Unlike other instruments available today, TruDefender FT brings the power of FTIR directly into the hotzone, enabling the responder to analyze - and act - faster than ever before.

Weighing less than three pounds (1.4 kg), TruDefender FT was built to meet the needs of the hazmat responder. It is ergonomically designed for easy use in Level A gear and rugged enough to withstand the rigors of field use.

With TruDefender FT, you can be confident that the tools, knowledge and know-how needed to safely respond to hazmat incidents are literally in the palm of your hand.

## KEY BENEFITS INCLUDE:

**Designed for use in the hotzone.** The lightweight and fully decon-capable system can be taken directly to an unknown substance in the hotzone, eliminating significant response time.

**Fast, accurate analysis you can act on.** TruDefender FT returns results in seconds, rather than the hour or more required to bring a sample from the hotzone and prepare it for analysis. An onboard hazard database provides full safety and treatment information, further speeding appropriate response.

**Precise results.** Ahura Scientific's DecisionEngine™ software reduces the need for scientific field support by providing clear, definitive results that don't require user interpretation or judgment. Automatic mixture analysis enhances substance identification capability and eliminates the need for subtraction of spectra.

**Easy to use.** Intuitive menu-driven user interface enables even novice users to be proficient with minimal training.

**Easy maintenance.** TruDefender FT is a self-contained unit which requires no scheduled maintenance or calibration, and uses no consumables.

**Flexible power source.** TruDefender FT can be powered using the included rechargeable battery; wall plug; or commonly available SureFire™ disposable batteries.

**Scan results**

**Sodium thiocyanate**  
 AKA: Sodium salt, Thiocyanate Acid  
 CAS: 540-72-7

3 0 1

1 match found

**Scan results**

Name Weight: 96% total

**Acetone**  
 AKA: Propanone  
 CAS: 67-64-1

1 3 0 54%

**Pseudoephedrine** 42%

Potential Mixture Identified

*TruDefender FT provides clear results which require no user intervention. Each analysis automatically checks for the presence of mixed chemicals.*

**Toluene**

Summary Desc Emerg.

**Warning**  
 Chemical is highly flammable. Avoid temperatures over 73°F

**Caution**  
 Chemical is a health hazard. Avoid skin contact, ingestion, and inhalation.

2 3 0

*Decision-support information is readily available, including detailed hazard precautions.*

### Complementary Technology

Building on Ahura Scientific's proven technology, TruDefender FT is a complementary tool to FirstDefender, the company's flagship handheld Raman system. Together, Ahura Scientific provides a comprehensive solution for identification of unknown liquid and solid chemicals.



## Specifications

<b>Weight</b>	<3 lbs (<1.4 kg)
<b>Size</b>	7.7" x 4.4" x 2.1" (19.6 cm x 11.2 cm x 5.3 cm)
<b>Spectral Range</b>	4,000 cm <sup>-1</sup> to 650 cm <sup>-1</sup>
<b>Spectral Resolution</b>	4 cm <sup>-1</sup>
<b>Collection Optics</b>	ATR Diamond Crystal
<b>Battery</b>	Rechargeable internal lithium ion battery, OR SureFire™ disposable batteries; >2 hours operation
<b>External Power Supply</b>	Wall plug transformer 100-240 VAC 50/60 Hz

Note: Product details current as of printing. All information subject to change. 28Jan2008