

The Trace^{X®} Explosives Kit detects all major HMEs with <u>just one swab.</u>

| Home Made Explosive (HME) Family | Representative Chemicals |
|-------------------------------------|--|
| Nitroaromatics | TNT, DNT, Tetryl |
| Nitramines & Nitrate Esters | RDX, HMX, PETN, EGDN, NG, R-Salt, Semtex |
| Inorganic Nitrates | urea nitrate, ammonium nitrate, black powder |
| Chlorates & Bromates | potassium chlorate, potassium bromate |
| Peroxides | TATP, HMTD |
| Acids | nitric acid, sulfuric acid |
| Bases | potassium hydroxide, sodium hydroxide |

Competitive Comparison

| | TraceX [®] Explosives Kit | Wipes | Pens |
|--|---|---|---|
| # of explosive families detected in one test cycle | 9 | 1-4 ¹ | 1-3 ¹ |
| Trace detection | Yes | Yes | Yes or No ¹ |
| Bulk detection | Yes | Yes | Yes |
| Time for results | ≤ 3 minutes total | 2-12 minutes ² | 2-12 minutes ² |
| Ease of use | Single swab and crush | Multiple swab and crush cycles, until a positive indication occurs | Multiple swab and crush cycles, until a positive indication occurs |
| Interpretation of results | Results clearly indicated | User interprets results based on color formed after serial analyses | User interprets patterns from multiple pens |
| User safety | All chemicals contained inside plastic case | Possible user exposure to chemicals | Possible user exposure to chemicals |
| Potential for sample contamination | Low ³ | High ³ | Medium ³ |
| Ruggedness | Each kit encased in protective plastic case | Fragile ampoules are minimally protected | Fragile ampoules have limited protection provided by pen casing |
| Heat source required | No | Yes or No ¹ | No |

¹ Depends on specific product.

Technical Specifications

| Operating Temperature Range | 2°C to 50°C (35°F to 122°F) |
|-----------------------------|---|
| Operating Humidity Range | 10% to 95% RH |
| Sensitivity | Trace Level (can also detect bulk levels) |
| Time for Color Change | Less than 3 minutes |
| Kit Size | 131 mm x 92 mm x 17 mm (5-1/4" X 3-3/4" X 3/4") |
| Shelf Life | 24 months ¹ |
| | |





² Each test can take ~2 minutes; total time depends on number of tests run in series.

³ For TraceX Explosives kit, sampling site is protected by cover, and user swabs with handle. For Wipes, user touches sampling site when swabbing. In some kits, reuse of dropper may introduce contamination. For Pens, user must avoid touching tip of pen (which is sampling site).