

Instructions for use the ETK five Kit

The Explosive Testing Kit (ETK five) for detecting military and improvised explosives is based on the reaction of explosives on a series of reagents encapsulated in glass ampoules within five plastic tubes numbered from 1 to 5. The immediate highly colored result of the reaction show a positive detection of explosive material in the sample.

Tubes 1 and 2 are designed to detect military explosives (nitro-aromatics and nitrate esters), tubes 3 and 4 are designed to detect improvised (homemade)explosives (inorganic nitrates, chlorates and bromates), tube no. 5 is designed to detect improvised explosives from group of organic peroxide (TATP, etc.)

Shelf life:

ETK five Reagents are guaranteed for eighteen (18) months under normal environmental storage conditions (25 C). Reagents may be kept for an extended period, thirty six (36) months, under refrigeration (4 C). After crushing the ampoules, reagents' reliability is guaranteed for up to 2 weeks (25 C) for tubes 1-4 and three (3)days for tube no.5.

Instruction for operation

Preparation

Release screw cap on top of tube no. 1 take the ampoules breaker and crash the ampoules well inside the tube, holding the tube upright. Close screw cap and shake the tube well in order to mix the solution inside. Repeat the same procedure for tubes no.2 and 3.

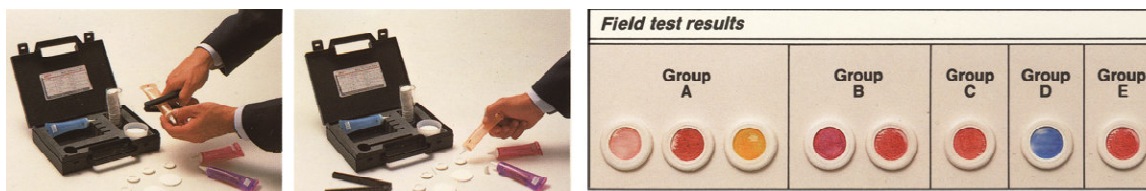
Sampling:

1. Place a sample of the suspected material (very tiny amount) on the test button, or alternatively wipe the suspected surface with a piece of the test paper. In certain cases the paper may be first moistened with acetone - this may enhance sensitivity.
2. Add a drop from tube no. 1 onto the test button. If there is within seconds a color reaction of **pink-orange-red**, the suspected material contains explosive material from group A (TNT, or equivalent to it) in case of picric acid, the color developed will be **yellow**.
3. If there is no color reaction, add a drop from tube no.2 onto the **same** test button paper. If there is within seconds a color reaction of **purple-red**, the suspected material contains material from group B (RDX, PETN, Nitroglycerine, HMX, Smokeless powder, C4 and SEMTEX)
4. If there is no color reaction, carry on adding a drop from tube no.3 (shake well before use) onto the **same** test button. If within 10 seconds a **red** color appears, the suspected material contains improvised explosive of nitrate type (ANFO, Black powder, NH₄NO₃, KNO₃, NaNO₃, etc.)

5. If the reaction after sequentially adding drops from tubes 1, 2, 3 is negative (no color), take a **new test button** and add once again a small sample or make another smear test of the suspected material or person.
6. Prepare tube no.4 as detailed above for tubes 1, 2 and 3. Add a drop from tube no. 4 If within about 20 seconds a **blue** color appears , the suspected material contains improvised explosive material of chlorate or bromated type. In case of a negative response, go to the next test.
7. Take a **new test button** and add once again a small sample or make another smear test of the suspected material or person.
8. Prepare tube no.5 as detailed above. After crashing the glass ampoules **wait 2 minutes** before using a tube.
9. Add drop from the tube no.5 to the test button (or test paper). If within about 1 minute a **red** color reaction appears , the suspected material contains improvised explosive material from group E (organic peroxide like: TATP, ACP, HMTD)

Quick Reference Table

Using tube no.	Expected color	Conclusion
1	Pink or yellow	Explosives from group A (TNT,DNT,TNB,TETRYL),picric acid
1 + 2	Purple or red	Explosives from group B (NG,PETN,RDX,HMX,NC,C4,SEMTEX, smokeless powder
1 + 2 + 3	Red	Explosives from group C Inorganic nitrates
4	Blue	Explosives from group D Inorganic chlorates and bromates
5	Red	Explosives from group E Organic peroxides (TATP,ACP,HMTD)



Warning:

Harmful if swallowed or inhaled< In case of contact with eyes or skin, wash with plenty of water and seek medical advice< Working in ventilation area-recommended < Use gloves. The use of goggles is recommended

Material safety data sheet (MSDS) will be provided upon request.