

Storage and disposal

The Sulfur Mustard Detector should be stored at temperatures of +5°C to +25°C. Please do NOT FREEZE the Sulfur Mustard Detector.

Used and expired tests shall be disposed of in the residual waste.

Please respect the applicable disposal rules.

Transportation and test implementation

During transportation, the Sulfur Mustard Detector shall be stored at +5°C to +35°C for a maximum of 3 days.

If used during rain or snow, the Sulfur Mustard Detector shall be protected from humidity.

The analysis shall be conducted at +5°C to +40°C.

For temperatures below +5°C, the closed test shall be heated, for example in the hands.

Quality control

The Sulfur Mustard Detector contains an integrated control line. The control line displays functionality and the correct performance of the test.

Performance data sheet

Substance	Cut-off*	Number of tests (N)	Sensitivity [%]	Specificity [%]
Sulfur Mustard	2 mM	20	100	100

The sensitivity is determined by the manufacturer by means of dilution series with defined Sulfur Mustard concentrations. Starting material was an 8 M solution, whose concentration had been determined by means of NMR (Nuclear Magnetic Resonance). The specificity was determined by wiping test on non contaminated skin surface.

* The Cut-off is defined as a value where all conducted tests show a positive result.

Cross reactions

The substances that produce cross reactions in the Sulfur Mustard Detector were analyzed in the manufacturer's laboratory. A complete list of substances with cross reactions can be provided upon request.

Ordering information

Item no.	Test
LS-01.CE	Sulfur Mustard Detector Proof of skin contamination with the chemical weapon mustard gas

Further products

NEW - Blood test for cholinesterase inhibition in the field

- Detects organophosphate intoxications
- Simple finger tip testing method
- Reliable results in only 4 minutes
- Aids for diagnosis and therapy



Sulfur Mustard Detector

Wiping test to detect Sulfur Mustard on skin surface

Item no. LS-01.CE



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Intended Use

Using the Sulfur Mustard Detector, medical staff can determine if a patient has been exposed to the chemical weapon mustard gas and derive protective measures. The Sulfur Mustard Detector specifically detects mustard gas by means of a skin smear test (not applicable for other surfaces). The analysis provides a qualitative result. The Sulfur Mustard Detector can only be used once. The test can only be used for in-vitro diagnostics.

Test principle

The Sulfur Mustard Detector is based on an immunological process. Free Sulfur Mustard on skin surface is absorbed by the moistened sampling pad. The sampling pad transmits the specimen to the test strip. On the test strip, there are Sulfur Mustard-specific antibodies colored with a red label. Sulfur Mustard absorbed by the wiper binds the antibodies. The test contains an integrated ampoule filled with liquid. The test starts once the ampoule is crushed and the liquid is released. The liquid carries the antibody-bound analytes towards the test line. The test line turns visibly red. The test is only valid if the control line is also coloured in red. After 10 minutes, the test can be evaluated.

Package content

The test contains:

- 1 Sulfur Mustard Detector test
- 1 small water bottle

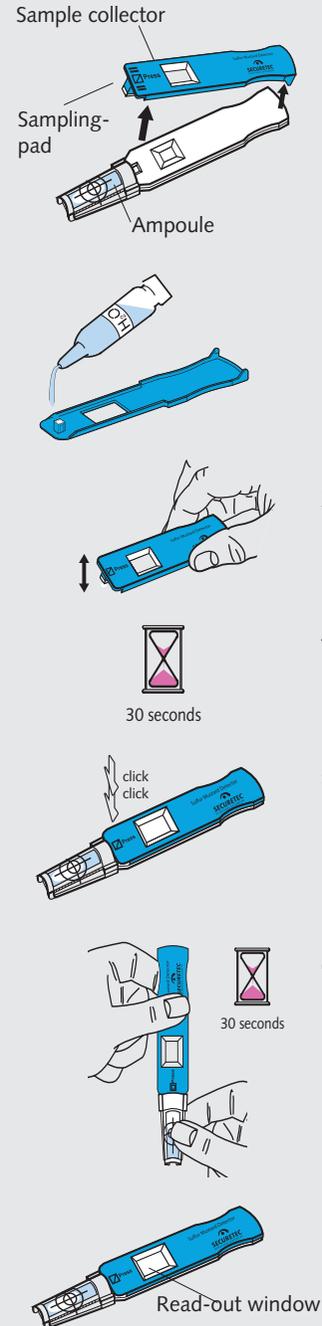
Not contained in the test, but required in certain cases:

- 1 clock
- 1 pair of appropriate protection gloves

Test preparation

1. Check date of expiration on the package. Discard test if expiration date is exceeded.
2. Check packaging for potential damage. Please do not use the test if packaging has been damaged, if it is damp at the inside or if the control line is already coloured in red.
3. Please open packaging only shortly before use at the marked area.

Test implementation

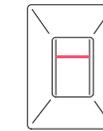


1. Remove the blue sample collector from the white test cassette. **Do not touch sampling pad.**
2. Wet test pad with one drop of the water from the bottle and shake off any excess water. **Do not touch sampling pad.**
3. Dab skin with sampling pad approx. 5 to 6 times with slight pressure.
4. Wait 30 seconds!
5. Place the blue sample collector back onto the white test cassette and press home. The sampling pad must connect with an audible double click.
6. Hold the test cassette vertically and press strongly on the crosshair. The breaking of the ampoule is clearly audible. Keep cassette in vertical position for further 30 seconds.
7. Lay the test on a horizontal surface and commence timing. Read the test result after 10 minutes. Ignore test results after. Do not move the test during that time.

Test Interpretation

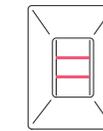
The evaluation window shows a control line and a test line. They correspond to the following acronyms:

CL	Control line
TL	Test line



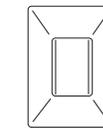
Negative result = no Sulfur Mustard

The test is valid if the control line turns red. The test is negative for Sulfur Mustard if the test line does not turn red.



Positive result = Sulfur Mustard

The test is valid if the control line turns red. The test is positive for Sulfur Mustard if the test line turns red as well.



Invalid result

The test is invalid if the control line does not turn red. Please repeat analysis with another Sulfur Mustard Detector.

Note: The test is also positive if the test line is only slightly red or if the red color is incomplete. Please let the test develop for 10 minutes before starting the evaluation.

Precautions

- Please wear appropriate protection equipment to carry out analysis if necessary.
- Please evaluate test with sufficient lighting, e.g. using a torch.
- Please be aware that red-green defective vision can hamper a correct test evaluation.