

Operating Instructions
Low pH (Acid) Cassette
(Part Number: 084005)

Applications:

The Chameleon is the only hands-free, power-free, chemical detector for gases and vapors **in air**, allowing First Responders, Firefighters, EMS, Police Officers and Military to detect the presence of hazardous chemicals. No liquid sample required. The Chameleon may even be immersed in salt water or fresh water without affecting its performance. Developed under funding by the United States Marine Corps, the Chameleon is ideal for users to screen unknown hazards in their environment.

Common acid gases include **hydrochloric acid, hydrobromic acid, hydrofluoric acid and nitric acid**. Exposure can occur in many situations. Storage tank leaks in chemical plants and during transportation result in exposure to acid vapors. Hydrochloric acid can be released when PVC electric cable jacketing is burned. Fluorocarbon refrigerants are non-flammable and non-explosive, but exposure to flames or hot surfaces will cause these compounds to generate hydrochloric acid and hydrofluoric acid. Household chemicals, when exposed to high heat can also generate acid vapors. A growing source of exposure to acid vapors occurs in clandestine methamphetamine laboratories.

Specifications:

The chemical sensor in the low pH (acid) cassette shows an easy to see color change. Half of the sensor window will change color as shown in the example below:



Unexposed

Exposed

Description	Concentration	Reaction Time
Low pH (Acid)	pH < 5	1 - 3 minutes

Interferences:

The Low pH (Acid) cassette was exposed to saturated vapor concentrations of toluene, bleach, DEET, gasoline, diesel fuel and JP-8 jet fuel for one hour. No false positive or false negative readings were observed. Repeated immersion in a layer of oil/fuel on top of salt water had no effect on the performance of the Low pH (Acid) cassette. **Morphix Technologies recommends using the High pH (base) cassette with the Low pH (acid) cassette to provide complete pH detection.**

Operating Instructions:

1. Expiration date marked on packaging is based on storage at or below 77°F/25°C. Storage at higher temperatures reduces shelf life.
2. Product shelf life when stored at 122°F/50°C is thirty days.
3. At time of use - remove cassette from its protective pouch.
4. Holding cassette with text facing up, slide cassette into Chameleon armband until the cassette firmly snaps into the armband.
5. Periodically view the cassette to observe color change in half of the sensor window.
6. Discard cassette after color change is observed or after 24 hours of use.
7. DO NOT use cassette beyond 24-hour service life.

WARRANTY EXCLUSIONS AND LIMITATION OF LIABILITY

IF THE USER DOES NOT ACCEPT THE FOLLOWING TERMS, THE USER SHOULD NOT USE THE CHAMELEON CASSETTE AND ARMBAND.

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Warning: Keep out of reach of children, if ingested seek medical attention immediately.

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