



Mercaptans  
Breakthrough Indicator (BTI)  
For Carbon Absorbers  
HSR BTI WP  
(PN: 171)

*Manual*



### 1. Application

The Mercaptans Breakthrough Indicator (PN: 171) is qualitative (yes/no) colorimetric indicator for the end-of-service life of carbon absorbers and filters. It is designed to provide real-time indication of the breakthrough of mercaptans. Water has no effect on the breakthrough indicator.

### 2. Specifications

- |                              |   |
|------------------------------|---|
| a. Weight:                   | 28g (1.0oz)                             |
| b. Dimensions:               | 89.9mm (3.5in), diameter 24.5mm (1.0in) |
| c. Inlet dimensions:         | 3/8" MNPT                               |
| d. Operating temperature:    | -20°C to 65°C (-4°F to 149°F)           |
| e. Operating humidity:       | 5% RH to 95%RH                          |
| f. Minimum detectable limit: | 1ppm-hr. at 30 cc/sec face velocity     |
| g. Color change:             | Olive green to pink                     |
| h. Storage temperature:      | 4°C to 25°C, (39°F to 77°F)             |
| i. Shelf life:               | 1 years at 4°C to 25°C, (39°F to 77°F)  |
| j. Service life:             | 1 year                                  |
| k. Water effect:             | Waterproof                              |
| l. Light effect:             | None                                    |

Cross interferences: High concentrations of ammonia or hydrogen sulfide produce similar color. No other interferences are known.

### 3. Operating Instructions

- Ensure that packaging pouch is intact.
- Open packaging pouch by tearing off the top part from one of side notches.
- Remove the breakthrough Indicator from the packaging pouch.
- Remove the 3/8" threaded plug from the carbon absorber outlet lid.
- Remove the protective red plugs to activate the breakthrough indicator.
- Thread the Breakthrough Indicator into the 3/8" threaded carbon absorber outlet.



Caution: Only hand tighten indicator into carbon absorber

- Replace carbon absorber when the Breakthrough Indicator changes color to pink.



Unexposed



Exposed  
Change carbon  
absorber

