



Acids  
Breakthrough Indicator (BTI)  
For Carbon Absorbers

(PN: 180)

*Manual*



### 1. Application

The Acids BTI (PN: 180) is qualitative (yes/no) colorimetric indicator for the saturation and end-of-service life of carbon absorbers. It is designed to provide real-time indication of the breakthrough of acid vapors.

### 2. Specifications

- a. Weight: 28g (1.0oz)
- b. Dimensions: 89.9mm (3.5in), diameter 24.5mm (1.0in)
- c. Inlet dimensions: ¾" MNPT
- d. Operating temperature: -20°C to 55°C (-4°F to 131°F)
- e. Operating humidity: 5% RH to 90%RH
- f. Minimum detectable limit: 4ppm-min at 30 cm/sec face velocity
- g. Color change: Orange to dark red
- h. Storage temperature: 4°C to 25°C, (39°F to 77°F)
- i. Shelf life: 14 months at 4°C to 25°C, (39°F to 77°F)
- j. Service life: 14 months

Cross interferences: Basic vapors in high concentrations impair the performance of the acid breakthrough indicator. No other interferences are known.

### 3. Operating Instructions

- a. Ensure that packaging pouch is intact.
- b. Open packaging pouch by tearing off the top part from one of side notches.
- c. Remove the Breakthrough Indicator from the packaging pouch.
- d. Remove the ¾" threaded plug from the carbon absorber outlet lid.
- e. Remove the protective red plug to activate the breakthrough indicator.
- f. Screw in the Breakthrough Indicator into the ¾" threaded carbon absorber outlet lid.

 **Caution: Only hand tighten indicator into carbon absorber**

- g. Replace carbon absorber when the Breakthrough Indicator changes color to orange or dark red.



Unexposed



Exposed  
Change carbon absorber