

**Pyridine and Basic Vapors
Filter Breakthrough Indicator
(BTI LFF)
(PN: 169-0000)**



Manual



1. Application

The Breakthrough Indicator (PN: 169-0000) is qualitative (yes/no) colorimetric indicator for the exhaustion and end-of-service life of low-flow filters. The indicator is designed to provide real-time indication of the breakthrough of pyridine and basic vapors such as ammonia and aliphatic amines.

2. Specifications

2.1. Overall Specification

- | | |
|------------------------------|--|
| a. Weight: | 4.4g (0.16oz) |
| b. Dimensions: | 79mm (3.1in), diameter: 10mm (0.39in) |
| c. Operating temperature: | -20°C to 55°C (-4°F to 131°F) |
| d. Operating humidity: | 5% RH to 85%RH |
| e. Minimum detectable limit: | 1ppm•hr. at face velocity 30 cm/sec |
| f. Color change: | Yellow to green or blue |
| g. Storage temperature: | 4°C to 25°C, (39°F to 77°F) |
| h. Service life: | 1 year |
| i. Shelf life: | 14 Months at 4°C to 25°C, (39°F to 77°F) |

2.2. Cross interferences

Acidic vapors in high concentrations impair the performance of the basic vapors breakthrough indicator.

3. Operating Instructions

- Ensure that packaging pouch is intact.
- Open packaging pouch by tearing off the top part from one of side notches.
- Remove one Breakthrough Indicator from packaging pouch, reseal pouch.
- Remove the 3/8" plug from filter's outlet lid.
- Remove the protective red plug to activate the breakthrough indicator.**
- Attach Breakthrough Indicator into filter outlet (closed pores foam adapter is required; please contact us for details).



- Replace filter when the Breakthrough Indicator changes color green or blue.



Filter is good



Replace filter