

**Halogen Gases
Filter Breakthrough Indicator
(BTI LFF)
(PN: 137-0000)**



Manual



1. Application

The Halogens gases Breakthrough Indicator (BTI LFF) (PN: 137-0000) is qualitative (yes/no) colorimetric indicator for the saturation and end-of-service life of filters. The indicator is designed to provide real-time indication of the breakthrough of halogen gases.

2. Specifications

- | | |
|------------------------------|---------------------------------------|
| a. Weight: | 4.4g (0.16oz) |
| b. Dimensions: | 79mm (3.1in), diameter: 10mm(0.39in) |
| c. Operating temperature: | 4°C to 40°C (39°F to 104°F) |
| d. Operating humidity: | 5% RH to 85%RH |
| e. Minimum detectable limit: | 0.5ppm•hr at 30 cm/sec face velocity |
| f. Color change: | Yellow or orange to red or purple |
| g. Storage temperature: | 4°C to 25°C, (39°F to 77°F) |
| h. Shelf life: | 1 year at 4°C to 25°C, (39°F to 77°F) |
| i. Service life: | 1 year |

Cross interferences: Hydrogen chloride & hydrochloric acid vapors at concentrations greater than 0.5 ppm impair the performance of the halogens breakthrough indicator. Halogens concentrations greater than 50 ppm for extended period bleaches the halogen indicator. 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 and reseal Pouch.
- 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 to red or purple.



Filter Is Good



Filter Exhausted
Replace Filter



Filter Over Saturated