



Nitrogen Dioxide Gas
Breakthrough Indicator
For Carbon Absorbers
NO₂ BTI 3
(PN: 449)



Manual



1. Application

The Nitrogen Dioxide BTI 3 (PN: 449) 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 nitrogen dioxide gas.

2. Specifications

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|------------------------------|--|
| a. Weight: | 204.5g (7.2oz) |
| b. Dimensions: | 11.43cm (4.5in), diameter 7.62cm (3.0in) |
| c. Inlet dimensions: | 2.5" 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: | 0.5ppm-hr at 30 cm/sec face velocity |
| g. Color change: | Off white to gray to black |
| 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 |
| k. Light effect: | None |

Cross interferences: Other nitrogen oxides and strong oxidizers 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 2.5" threaded plug from the carbon absorber outlet lid.
- Remove the protective red plug to activate the breakthrough indicator.
- Thread the Breakthrough Indicator into the 2.5" threaded carbon absorber outlet lid.



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

