

Formaldehyde Breakthrough Indicator For Carbon Absorbers

(PN: 183)





Manual



1. Application

The Formaldehyde Breakthrough Indicator (PN: 183) is qualitative (yes/no) colorimetric indicator for the end-of-service life of carbon absorbers. It is designed to provide real-time indication of the breakthrough of formaldehyde vapor.

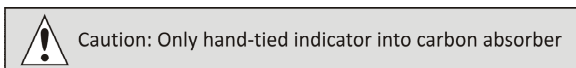
2. Specifications

a. Weight:	28g (1.0oz)
b. Dimensions:	89.9mm (3.5in), diameter: 24.5mm (1.0in)
c. Inlet dimensions:	3/4" MNPT
d. Operating temperature:	-20°C to 55°C (-4°F to 131°F)
e. Operating humidity:	5% RH to 85%RH
f. Minimum detectable limit:	0.4ppm•hr at 30 cm/sec face velocity
g. Color change:	brown  to dark blue 
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: Acrolein and aldehydes found in cigarette smoke react with approximately the same sensitivity. The formaldehyde breakthrough indicator was exposed to atmospheres containing at least two times the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) for the following substances: alcohols (methanol, ethanol and isopropanol), aromatic hydrocarbons (benzene, toluene and xylene), halogenated hydrocarbons (chloroform, methylene chloride and carbon tetrachloride), ammonia, carbon monoxide, chlorine, glutaraldehyde, hydrogen sulfide, nitrogen dioxide, phenol and sulfur dioxide. These substances showed no effect on the performance of the formaldehyde breakthrough 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.
- Remove the 3/4" threaded plug from the carbon absorber outlet lid.
- Remove the protective red plug to activate the breakthrough indicator.
- Thread the Breakthrough Indicator into the 3/4" threaded carbon absorber outlet lid.



- Replace carbon absorber when the Breakthrough Indicator changes color to dark brown or dark blue.

