

ChemWipe Nickel Compounds Wipe for Surfaces Low Range (PN: 338)

Manual



1. Application

The ChemWipe PN: 338 is a colorimetric surface wipe designed to provide real-time indication of the presence of trace amounts of Nickel compounds on surfaces. The unique design of the Nickel ChemWipe provides uniform color change formation enabling user to quantify nickel contamination using the nickel color comparator (PN: 338-6000).

2. Specifications

2.1. Overall Specification


- | | |
|--|--|
| a. Weight: | 0.5g (0.02oz) |
| b. Dimensions: | 8.5mm (0.33in), Φ : 32mm (1¼" in) |
| c. Operating temperature: | 4°C to 60°C (39°F to 140°F) |
| d. Operating humidity: | 5% RH to 95%RH |
| e. Minimum detectable limit: | 1µg |
| f. Detection range (color comparator): | 1µg to 200µg |
| g. Color change: | White to red |
| h. Color stability: | 6 months |
| i. Storage temperature: | 4°C to 25°C, (39°F to 77°F) |
| j. Shelf life: | 1 year |

2.2. Cross interferences and limitations

It is difficult to detect 2ug of nickel in presence of 50 times cobalt or iron. No other interferences are known.

3. Operating Instructions

- Use gloves and protective glasses when handling mercury.
- Ensure that packaging pouch is intact.
- Open packaging pouch by tearing off the top part from one of side notches.
- Remove wipe from packaging pouch.

 Caution: Avoid touching wipe media collection surface

- Hold the ChemWipe from the round handle (Figure 1) and swipe the target surface (Figure 2). If you are dealing with rough or irregular surface, wet the bottom surface with 3 to 4 drops of water and swipe the target surface immediately as shown in Figure 2.
- Add 3 to 4 drops of developing solution
- Allow five minutes for color development. Formation of red color on the ChemWipe indicates the presence of at least 1µg of nickel.

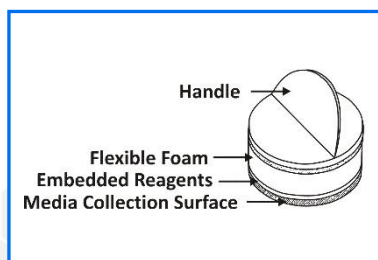


Figure 1



Figure 2

- Use the color comparator (Figure 3) to quantify the mass of nickel collected on the wipe:
 - Insert the protective sleeve into the top left corner of the color comparator (Figure 4).
 - Place the wipe upside down on the protective sleeve (Figure 5).
 - Turn the bottom color wheel to match colors. The color formed on the wipe is directly proportional to the mass of nickel collected on the wipe.
 - To compensate for any dark substance or dirt collected with the sample, turn the top gray scale wheel to achieve exact color match.



Figure 3

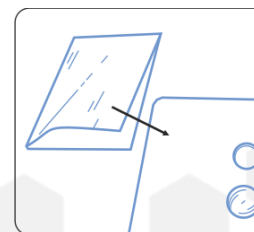


Figure 4

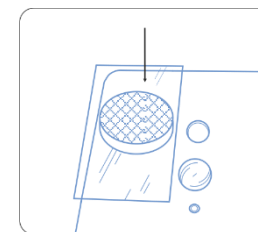


Figure 5