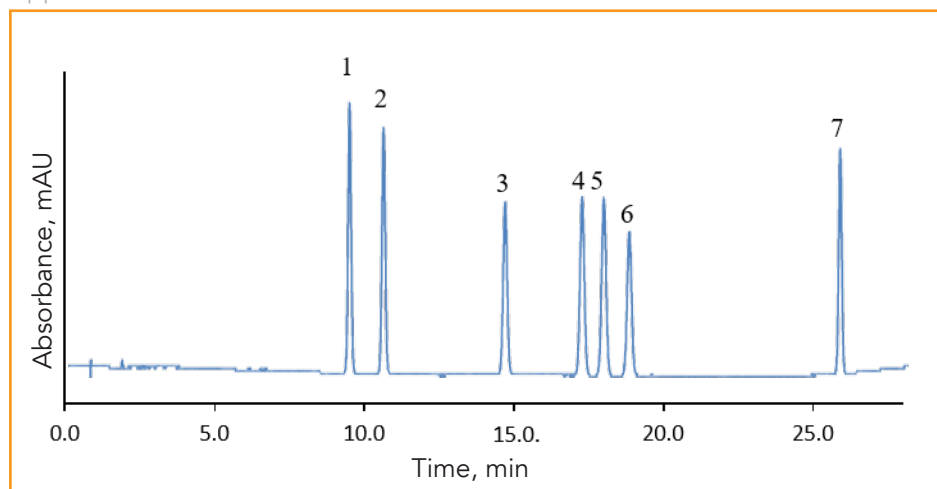




Chinese Pharmacopeia Separation of Parabens on HALO® C18, 2.7 µm

Application Note 177-P



PEAK IDENTITIES:

1. Isopropyl paraben
2. Propyl paraben
3. Phenyl paraben
4. Isobutyl paraben
5. Butyl paraben
6. Benzyl paraben
7. Pentyl paraben

A separation of parabens is performed on a HALO® C18 column showing high resolution between critical pairs using a Chinese Pharmacopeia method. Parabens are esters of para-hydroxybenzoic acid and have many varieties. Parabens are widely used in a variety of cosmetics as a preservative. This can include many things such as shampoos, moisturizers, makeup, and shaving gels.

TEST CONDITIONS:

Column: HALO 90 Å C18, 2.7 µm,
4.6 x 100 mm

Part Number: 92814-602

Mobile Phase:

- A: Water
- B: Methanol

Gradient:

Time (min)	% B
0.0	40
23.0	55
28.0	70

Flow Rate: 1.2 mL/min

Initial Pressure: 403 bar

Temperature: 30 °C

Detection: UV 252 nm, PDA

Injection Volume: 1.5 µL

Sample Solvent: 50/50 methanol/water

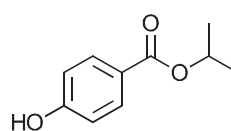
Response Time: 0.025 sec

Data Rate: 40 Hz

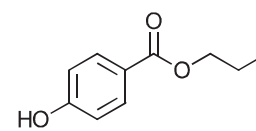
Flow Cell: 1.0 µL

LC System: Shimadzu Nexera X2

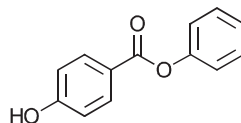
STRUCTURES:



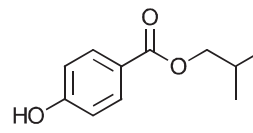
Isopropyl paraben



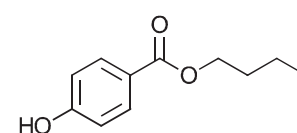
Propyl paraben



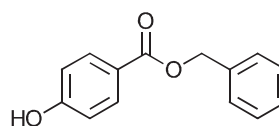
Phenyl paraben



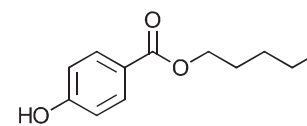
Isobutyl paraben



Butyl paraben



Benzyl paraben



Pentyl paraben

