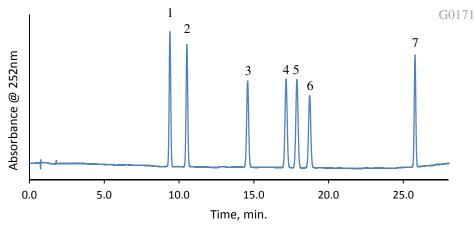
HALO: | Fused-Core® Particle Technology

Application Note: 177-P

Chinese Pharmacopeia Separation of Parabens on HALO C18, 2.7µm



PEAK IDENTITIES:

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

STRUCTURES:

TEST CONDITIONS:

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

Part Number: 92814-602

Mobile Phase A: Water Mobile Phase B: Methanol

Gradient: <u>Time</u> <u>%B</u> 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

injection volume. 1.5 µL

Sample Solvent: 50-50 Methanol-Water

Data Rate: 40 Hz

Response Time: 0.025 sec.

Flow Cell: 1 μL

LC System: Shimadzu Nexera X2

Isopropyl paraben

Propyl paraben

Phenyl paraben

Isobutyl paraben

Butyl paraben

Benzyl paraben

HO

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.

