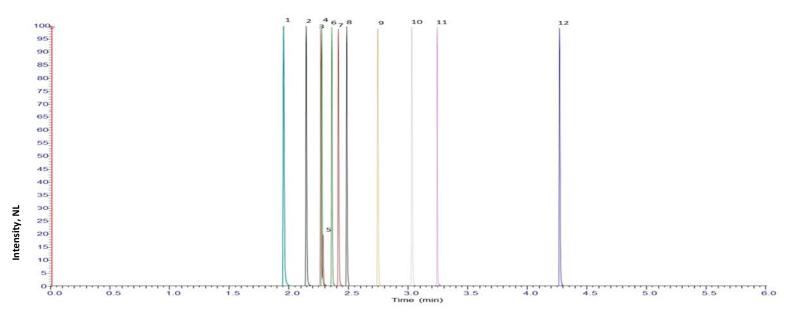
# HALO: | Fused-Core® Particle Technology

Application Note: 205-TOX

## LC-MS Separation SAMHSA 5 Panel on HALO<sup>®</sup> Biphenyl 2 μm

G0199



#### **TEST CONDITIONS:**

Column: HALO 90 Å Biphenyl, 2 μm,

2.1 x 100

Part Number: 91812-611

Mobile Phase A: Water/0.1% Formic acid

Mobile Phase B: Methanol/0.1% Formic

acid

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

0.0 5 4.00 98 5.00 98 5.01 5 7.00 END

Flow Rate: 0.4 mL/min Initial Pressure: 325 bar Temperature: 40 °C Injection Volume: 2 µL

Sample Solvent: 95/5 MeOH/Water LC System: Shimadzu Nexera X2

#### MS CONDITIONS:

Detection:: +ESI MS

Mass Spectrometer: Thermo Exactive

HF

Sheath gas flow rate: 50 (arbitrary

units)

Aux gas flow rate: 13 (arbitrary units)

Sweep gas flow rate: 0 (arbitrary units)

Spray voltage: 3.50 k V Cap temp: 263 °C S-lens RF level: 70 V

Aux gas heater temperature: 425 °C

### **PEAK IDENTITIES:**

- 1. Morphine (MH+= 286.341 g/mol)
- 2. Amphetamine (MH+= 136.206 g/mol)
- 3. Methamphetamine (MH+= 150.237 g/mol)
- 4. MDA (MH<sup>+</sup>= 180.221 g/mol)
- 5. Phentermine (MH $^+$ = 150.233 g/mol)
- 6. Codeine (MH+= 300.364 g/mol)
- 7. 6-MAM (MH+= 328.380 g/mol)
- 8. MDMA (MH<sup>+</sup>= 194.246 g/mol)
- 9. MDEA (MH+= 208.271 g/mol)
- 10. Benzoylecgonine (MH<sup>+</sup>= 290.331 g/mol)
- 11. PCP (MH<sup>+</sup>= 244.387 g/mol)
- 12. THC-COOH (MH+= 345.415 g/mol)

The 2 µm HALO Biphenyl is an ideal choice for high throughput analysis of drug panels, in which isobaric species separation is needed. Note the resolution between methamphetamine and phentermine, (peaks 3 and 5, respectively). The SAMHSA 5 panel consists of amphetamines, cocaine, marijuana, opiates, and phencyclidine (PCP).



FOR MORE INFORMATION OR TO PLACE AN ORDER, CONTACT: