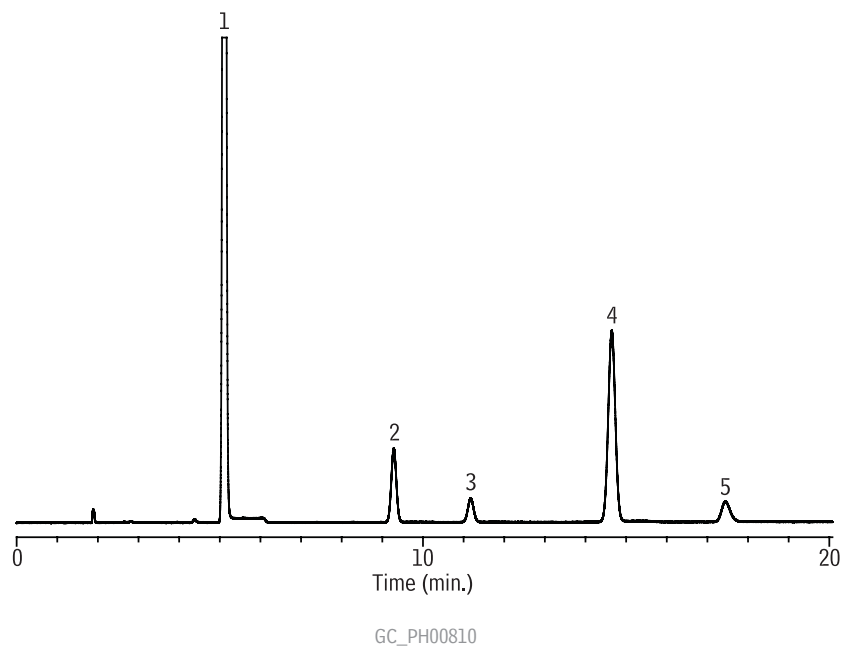


Organic Volatile Impurities

USP <467>

Rtx®-G43

(static headspace)



Column: Rtx®-G43, 30m, 0.53mm ID, 3.0 μ m (cat.# 16085-126)
Sample: USP <467> Calibration Mixture #5 (cat.# 36007) in DMSO stock standard. To each 22mL headspace vial 5ml water, ~ 1.0g of sodium sulfate and 100 μ L of stock standard were added.
The preparation yielded the following concentrations,

	Retention Time (min.)	Sample Concentration (μ g/mL)
1. dichloromethane	5.110	12.0
2. chloroform	9.285	1.2
3. benzene	11.173	0.04
4. trichloroethylene	14.647	1.6
5. 1,4-dioxane	17.436	7.6

Inj.: static headspace injection (see static headspace conditions)
Inj. temp.: 180°C
Carrier gas: helium, split 2:1
Linear velocity: 5mL/min., constant flow
Oven temp.: 40°C for 20 min. to 240°C at 25°C/min. (hold for 10 min.)
Det.: FID @ 250°C
hydrogen flow: 40mL/min.
air flow: 450mL/min.
make-up flow: 45mL/min.

Static Headspace (Loop) Conditions:
Instrument: Teledyne Tekmar HT3
Valve oven temp.: 150°C
Transfer line temp.: 150°C
Standby flow rate: 10mL/min.
Platen/sample temp.: 80°C
Platen temp equil. time: 2.00 min.
Sample equil. time: 15.00 min.
Mixer time: 2.00 min.
Mixing level: 5
Mixer stabilize time: 0.50 min.
Pressurize: 15psi
Pressurize time: 2.00 min.
Pressurize equil. time: 0.50 min.
Loop fill pressure: 5psi
Loop fill time: 2.00 min.
Loop fill equil. time: 0.50 min.
Inject time: 1.00 min.