

CoreFocus
Report
No.363

GC

FID

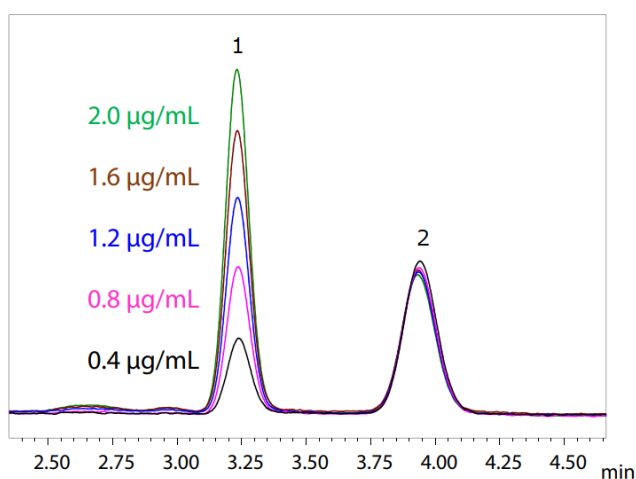
HS

SH Series

SH-PolarWax

Analysis of Residual Ethylene Oxide in Medical Devices

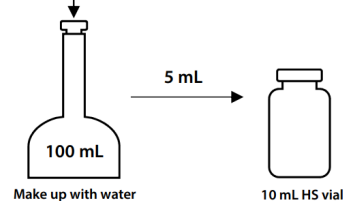
Keywords: EOG sterilization



1. Ethylene oxide (EO)
2. Propylene oxide (PO), Internal standard

<Standards>

100 µg/mL EO solution: 400 - 2000 µL
+
100 µg/mL PO solution (IS): 500 µL



Sample Preparation Method for Standards

Model	: Nexis™ GC-2030
Detector	: FID-2030 Flame Ionization Detector
Headspace Smapler	: HS-20
Analytical Column	: SH-PolarWax (30 m x 0.53 mm I.D. df = 2.00 µm), P/N: 227-36258-01
Column Temp.	: 40 °C (5 min) - 30 °C/min - 200 °C (20 min) Total 30.33 min
Injection Mode	: Split
Split Ratio	: 1:20
Carrier Gas Controller	: Constant Linear Velocity
Linear Velocity	: 30 cm/s (N ₂)
Detector Temp.	: 250 °C
Detector Gas	: H ₂ 32 mL/min, Air 200 mL/min
Makeup Gas	: N ₂ 24 mL/min
Injection Volume	: 1 µL

<HS>

Oven Temp.	: 70 °C
Sample Line Temp.	: 75 °C
Transfer Line Temp.	: 75 °C
Vial Volume	: 10 mL
Vial Shaking Level	: 3
Vial Equilibrating Time	: 30 min
Vial Pressurization Time	: 1 min
Vial Pressure	: 100 kPa
Loading Time	: 1 min
Needle Flush Time	: 8 min

Source : Application News 01-00140 ([JP](#), [ENG](#))

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