



| Peaks                                       | tr (min) |
|---|----------|
| 1. Acetaldehyde                             | 4.409    |
| 2. Methanol                                 | 4.511    |
| 3. Ethanol                                  | 5.440    |
| 4. n-Propanol                               | 6.883    |
| 5. Ethyl acetate                            | 7.452    |
| 6. Isobutanol                               | 8.182    |
| 7. Acetal                                   | 9.509    |
| 8. Isoamyl alcohol (3-methyl-1-butanol)     | 10.361   |
| 9. Active amyl alcohol (2-methyl-1-butanol) | 10.432   |

**Column** Rxi-1301Sil MS, 60 m, 0.25 mm ID, 1.00 µm (cat.# 16097)  
**Sample** Scotch  
**Conc.:** Neat  
**Injection**  
 Inj. Vol.: 1 µL split (split ratio 20:1)  
 Liner: Topaz 4.0 mm ID Precision inlet liner w/wool (cat.# 23305)  
 Inj. Temp.: 250 °C  
**Oven**  
 Oven Temp.: 40 °C (hold 1 min) to 300 °C at 10 °C/min (hold 1 min)  
**Carrier Gas** He, constant flow  
**Flow Rate:** 1.4 mL/min  
**Detector** MS  
**Mode:** Scan  
 Scan Program:

| Group | Start Time (min) | Scan Range (amu) | Scan Rate (scans/sec) |
|-------|------------------|------------------|-----------------------|
| 1     | 4                | 20-300           | 2.5                   |

**Transfer Line**  
 Temp.: 280 °C  
**Analyzer Type:** Quadrupole  
**Source Type:** Inert  
**Source Temp.:** 230 °C  
**Quad Temp.:** 150 °C  
**Electron Energy:** 70 eV  
**Tune Type:** BFB  
**Ionization Mode:** EI  
**Instrument** Agilent 7890A GC & 5975C MSD  
**Notes** Water coelutes with acetaldehyde and methanol, which results in distortion of the baseline.