Waxes
Analysis of paraffin wax

Application Note

Materials Testing & Research

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Introduction
Gas chromatography with an Agilent CP-SimDist Ultimetal column separates five components in a paraffin wax in 50 minutes.
Conditions

Technique: GC-capillary

Column: Agilent CP-SimDist CB UltiMetal, 0.5 mm x 10 m
WCOT CP-SimDist CB UltiMetal (df = 0 . 15 μm)
(Part no. CP7542)
with WCOT metal retention gap
0.55 mm x 75 cm methyl deactivated
(Part no. CP8067)

Temperature: 50 °C (2 min) → 100 °C, 10 °C/min;
100 °C → 300 °C, 5 °C/min;
300 °C → 430 °C, 3 °C/min; 430 °C (5 min)

Carrier Gas: He, 21 kPa (0.21 bar, 3 psi), 9 mL/ min

Injector: cool on-column

Detector: FID; T = 430°C

Sample Size: 0.5 μL

Solvent Sample: carbon disulfide; 10 mg/mL

Peak identification

1. n-C20
2. n-C20
3. n-C30
4. n-C30
5. n-C40

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