SHORT NOTE

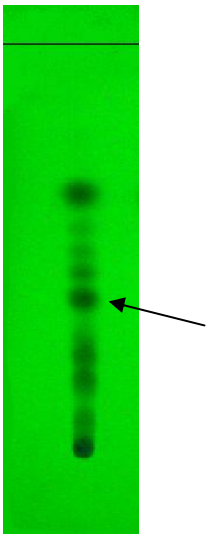
Isolation of Benzoin from a crude reaction mixture

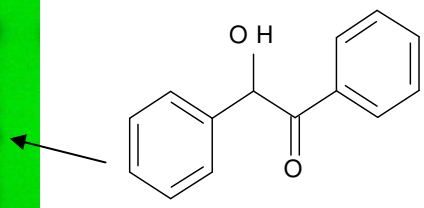
Separation using a linear gradient elution.

A. Talamona, BÜCHI Labortechnik AG

TLC of the crude reaction mixture:

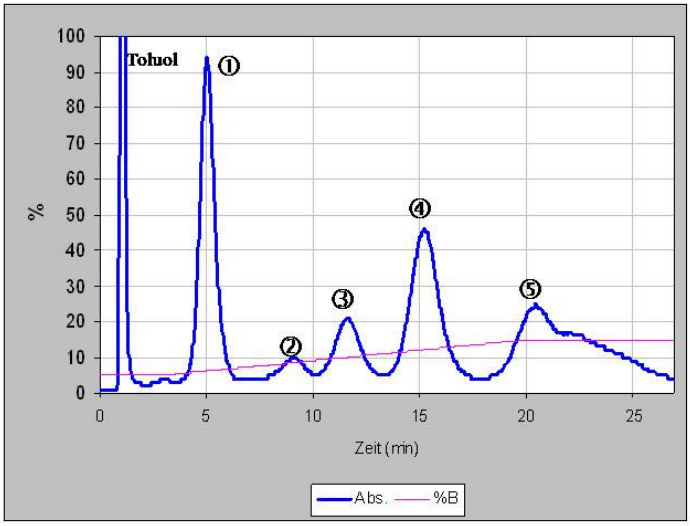
TLC on silica gel $Si60_{F254}$, developed in n-hexane/isopropyl ether 3:1, detection UV 254 nm



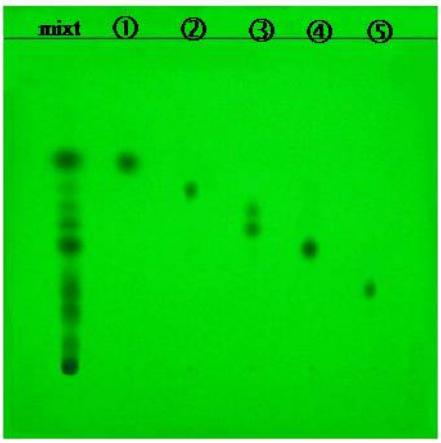


Benzoin

Separation



TLC-Check of the collected fractions



Silica gel $Si60_{F254}$, developed in n-hexane/isopropyl ether 3:1, detection UV 254 nm

Sepacore configuration

Cartridge 12 x 150mm, prepacked with silica gel 60, 40 – 63 µm
2 Pump Modules C-605
Fraction Collector C-660
Control-Unit C-620 with SepacoreControl software
UV Photometer C-635

Separation conditions

Eluent: n-hexane/isopropyl ether 7:3

Gradient: 3 min 5% B, 5 – 15% B in 17 min, 7 min 15% B
Flow rate: 10 ml/min
Sample: 250 mg crude mixture, dissolved in 0.5 ml toluene (solubility in n-hexane with 5% isopropyl ether too low)
Injection volume: 0.6 ml