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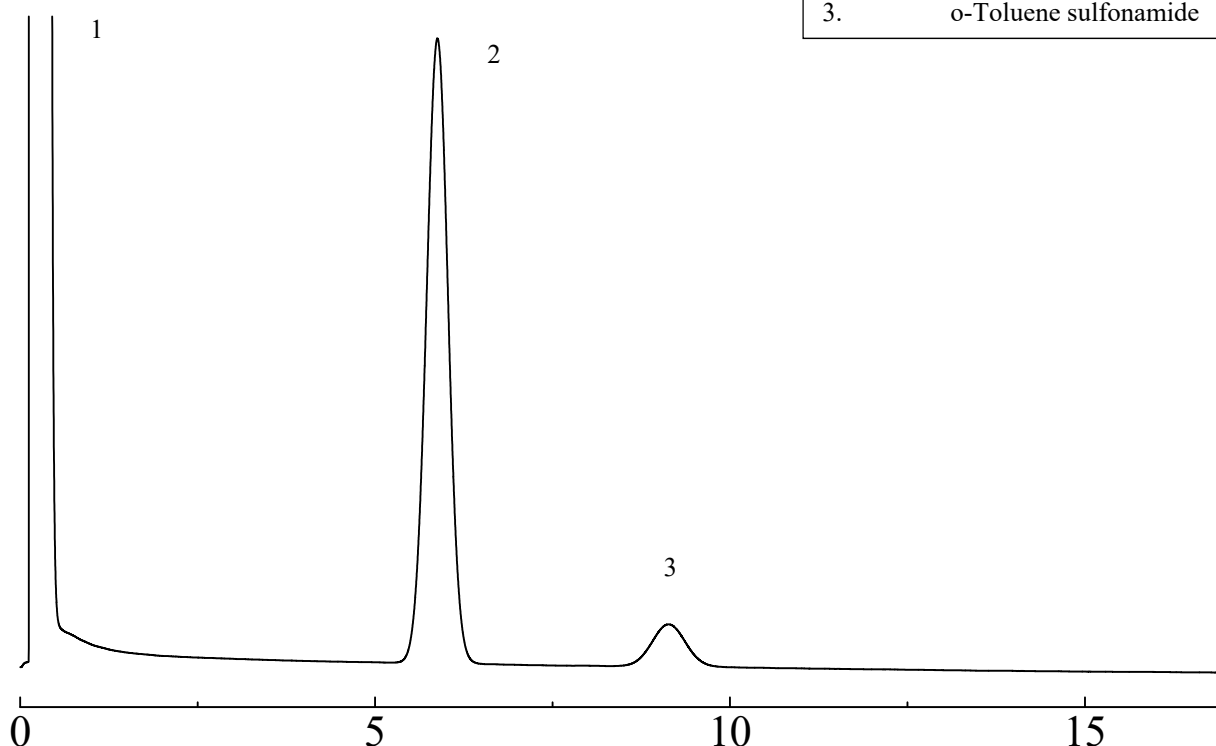
VOL. 102

Analysis of saccharin using Shinwasorb

Saccharin is an artificial sweetener which is approximately 500 times as sweet as sucrose, but it is a low calorie sweetener and used for diet, etc.

Shown below is an analysis of saccharin performed using a column packed with a Shinwasorb packing material and in accordance with the Japanese Pharmacopoeia.

DEGS 1.5% Shinwasorb-S 60/80



Column performance: resolution 4.4

(Caffeine and o-toluene sulfonamide are eluted in this order with the resolution between being these peaks being not less than 2.)

Column: 1.0 m x 3.0 mm I.D. Glass
Sample: Ethyl acetate, Caffeine, o-Toluene sulfonamide
Column temp.: 210
Injection port temp.: 225
Carrier gas: 55 mL/min N₂ (adjust so that the retention time of caffeine is about 6 minutes.)

Sample volume: 1.0 µL
Detector: FID 250

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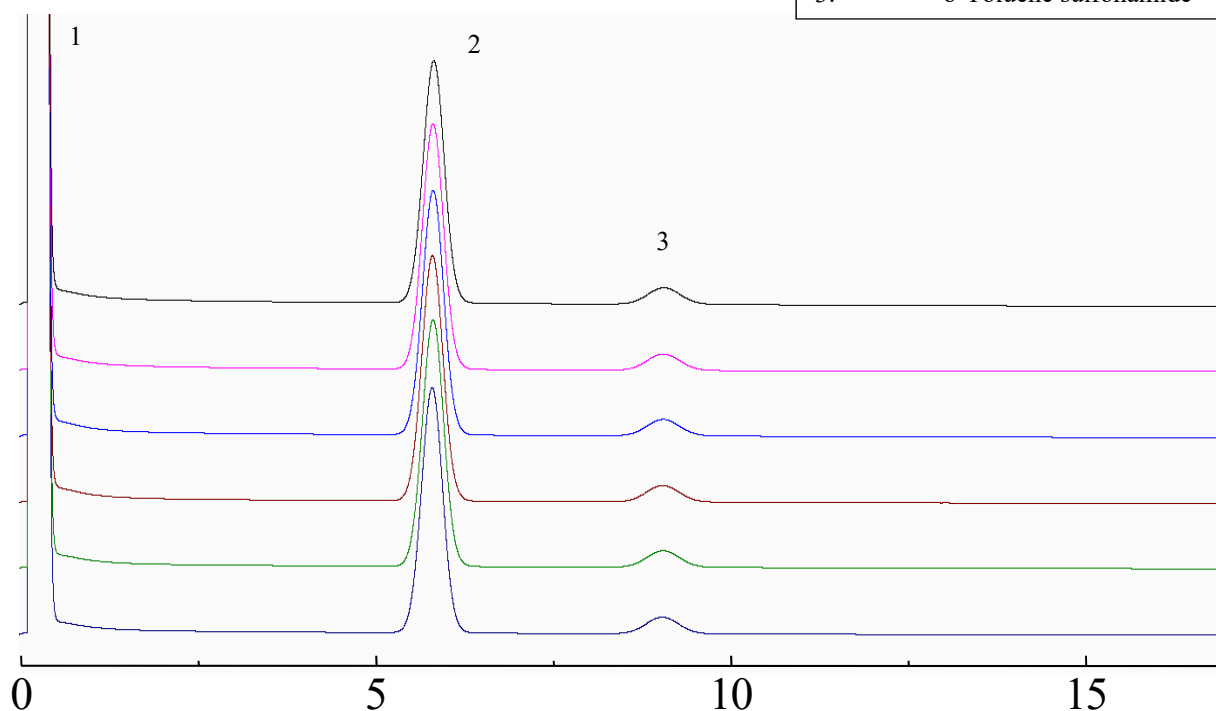
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DEGS 1.5% Shinwasorb-S 60/80

1. Ethyl acetate
2. Caffeine
3. o-Toluene sulfonamide

**System suitability**

System performance: The resolution between caffeine and o-toluene sulfonamide is 4.4.
(Caffeine and o-toluene sulfonamide are eluted in this order with the resolution between being these peaks being not less than 2.)

System repeatability: The relative standard deviation is 0.65%
(When the test is repeated 6 times, the relative standard deviation of the ratio of the peak height of o-toluene sulfonamide to caffeine is not more than 2.0%.)

Column: 1.0 m x 3.0 mm I.D. Glass
Sample: Ethyl acetate, Caffeine, o-Toluene sulfonamide
Column temp.: 210
Injection port temp.: 225
Carrier gas: 55 mL/min N₂ (adjust so that the retention time of caffeine is about 6 minutes.)

Sample volume: 1.0 µL
Detector: FID 250

Packing material specifications and price

Product name	Weight	Price
DEGS 1.5% Shinwasorb-S 60/80	25 g	15,100 JPY

Packed column specifications and price

Product name	Column material	Dimensions	Price
DEGS 1.5% Shinwasorb-S 60/80	Glass (For GC-2014 systems)	1.0 m x 3.0 mm I.D.	51,500 JPY

Prices for glass columns for Shimadzu systems other than the GC-2014, and systems manufactured by other manufacturers will differ from that shown above. The prices shown above are applicable as of February 24th, 2017. Please contact us for pricing.

Please feel free to contact us with questions related to analyses.

Please be aware that specifications and prices are subject to change without prior notification.