

SHINWA EXPRESS

Application

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Analysis of enflurane using Shinwasorb

~Purity test (3) Related substances~

Enflurane is used as an inhalation anesthetic. Shown below is an analysis of enflurane performed using a column packed with a Shinwasorb packing material and in accordance with the Japanese Pharmacopoeia.

DEGS 10% Shinwasorb-S 60/80

System suitability

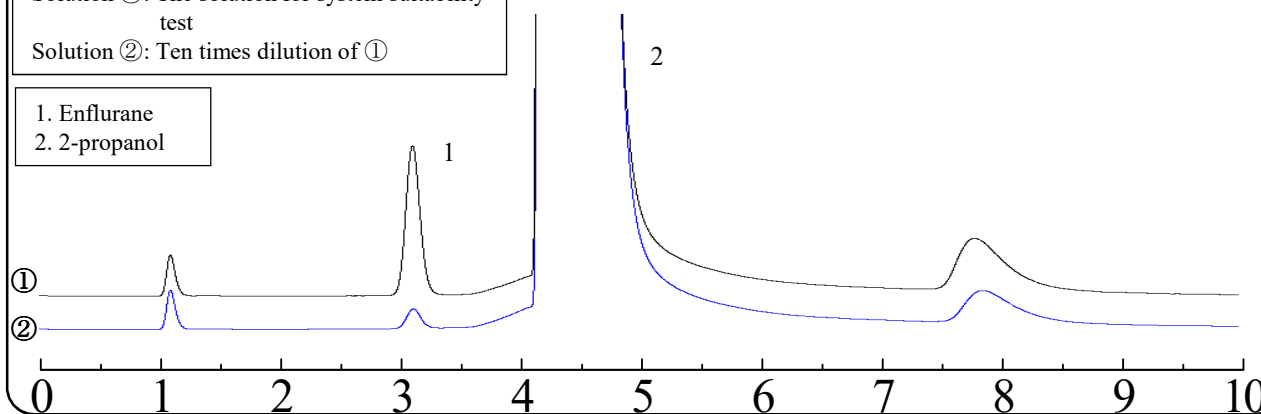
Detectability: 12%

(Confirm that the peak area of enflurane obtained from 5 μ L of Solution ① is equivalent to 7 to 13% of that obtained from 5 μ L of Solution ②.)

Solution ①: The solution for system suitability test

Solution ②: Ten times dilution of ①

- 1. Enflurane
- 2. 2-propanol

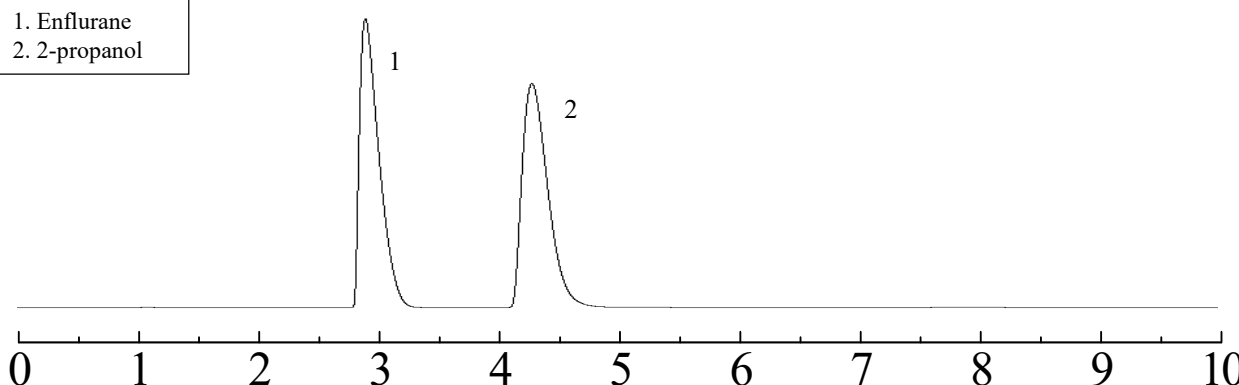


System suitability

System performance: The resolution is 4.1.

(Enflurane and 2-propanol are eluted in this order with the resolution between these peaks being not less than 2.0.)

- 1. Enflurane
- 2. 2-propanol



Column: 3.1 m x 3.2 mm I.D. Glass

Sample: Enflurane in 2-propanol

Column temp.: 80°C

Carrier gas: 32 mL/min He (Adjust so that the retention time of enflurane is about 3 minutes.)

※Time span of measurement: About 3 times as long as the retention time of enflurane.

Sample volume: 5.0 μ L

Detector: FID 200°C

Injection port temp.: 200°C



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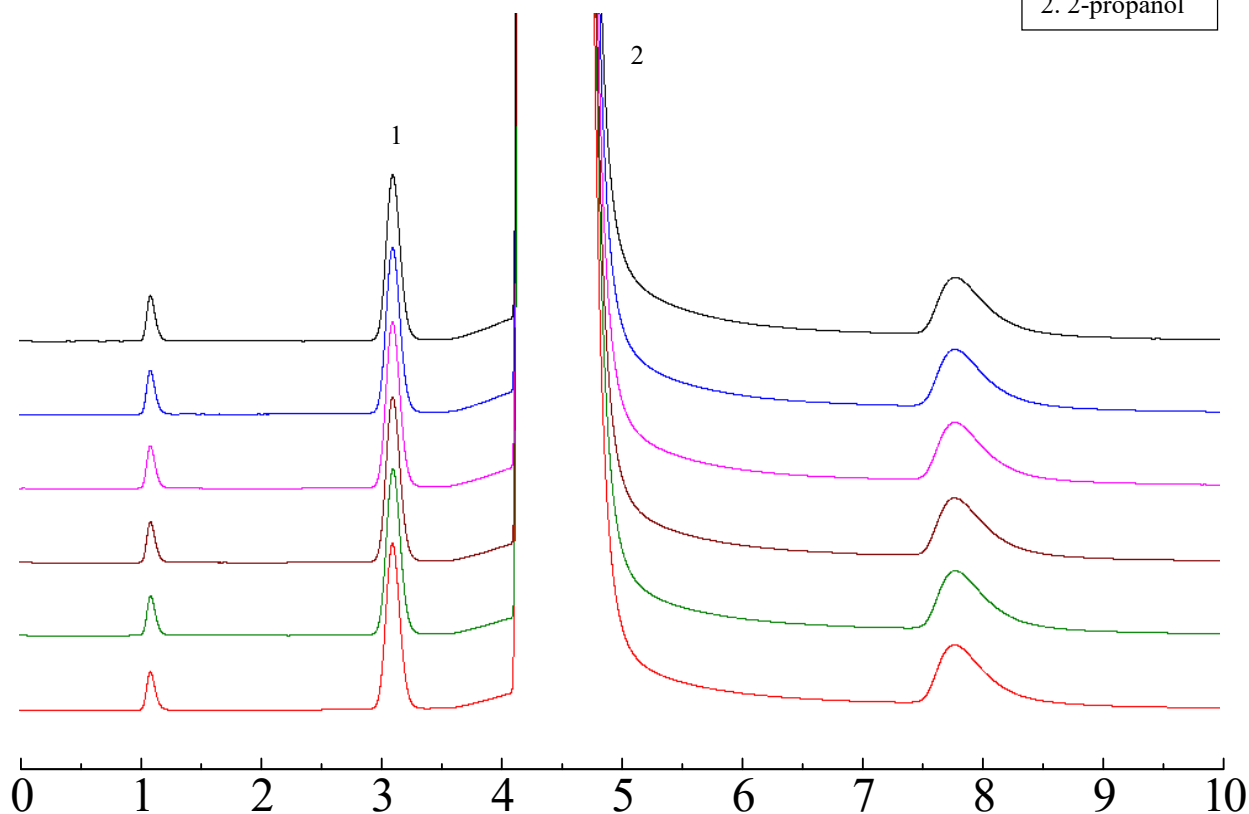
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DEGS 10% Shinwasorb-S 60/80

1. Enflurane
2. 2-propanol



System suitability

System repeatability: The relative standard deviation is 0.29%
(When the test is repeated 6 times, the relative standard deviation of the peak area of enflurane is not more than 2.0%.)

Column: 3.1 m x 3.2 mm I.D. Glass
Sample: Enflurane in 2-propanol
Column temp.: 80°C
Carrier gas: 32 mL/min He (Adjust so that the retention time of enflurane is about 3 minutes.)

Sample volume: 5.0 µL
Detector: FID 200°C
Injection port temp.: 200°C

※Time span of measurement: About 3 times as long as the retention time of enflurane.

■ Packing material specifications and price ■

Product name	Weight	Price
DEGS 10% Shinwasorb-S 60/80	25 g	15,100 JPY

■ Packed column specifications and price ■

Product name	Column material	Dimensions	Price
DEGS 10% Shinwasorb-S 60/80	Glass (For GC-2014 systems)	3.1 m x 3.2 mm I.D.	60,500 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 23rd, 2018. 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.