

# SHINWA EXPRESS

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## Analysis of lenampicillin hydrochloride using Shinwasorb

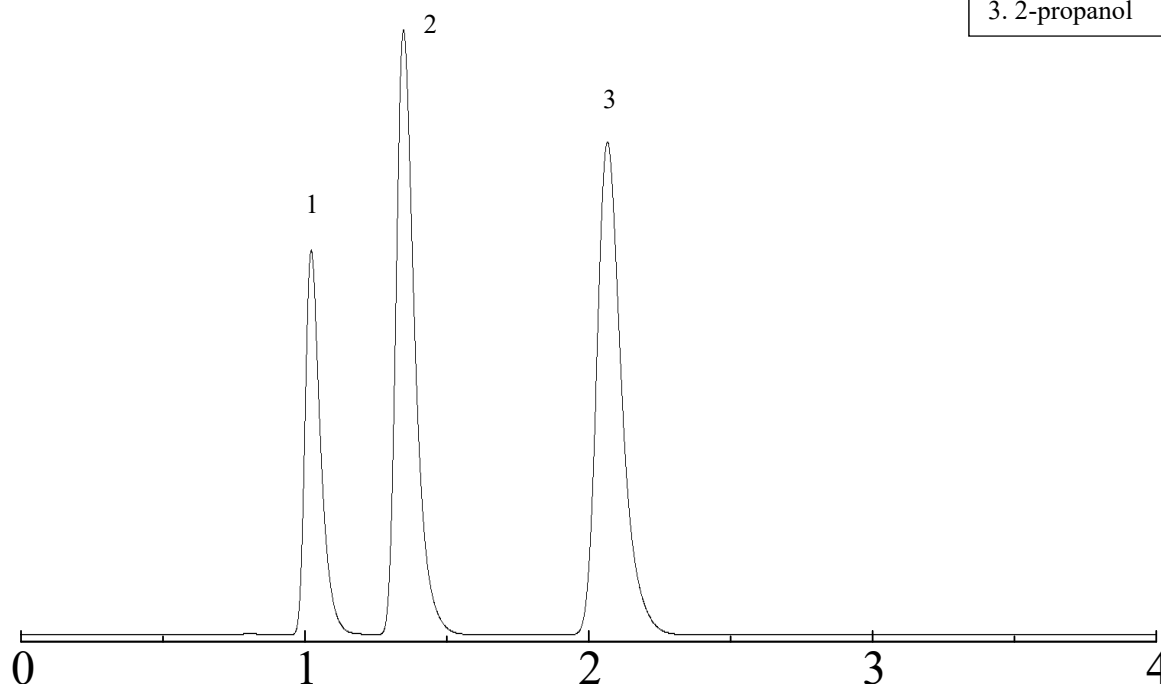
~Purity test (5) Residual solvent~

Lenampicillin hydrochloride is widely used as a penicillin antibiotic for treatment of infectious diseases.

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

### Quadrol 5% Shinwasorb-S 60/80

1. Cyclohexane
2. Ethyl acetate
3. 2-propanol



#### System suitability

System performance: The resolution between cyclohexane and ethyl acetate is 3.02.

(Cyclohexane, ethyl acetate and 2-propanol are eluted in this order, and the resolution between the peaks of cyclohexane and ethyl acetate is not less than 2.0.)

Column: 3.1 m x 3.2 mm I.D. Glass  
Sample: Cyclohexane, Ethyl acetate, 2-propanol  
Column temp.: 100°C  
Carrier gas: 70 mL/min N<sub>2</sub> (Adjust so that the retention time of cyclohexane is about 1 minute.)

Sample volume: 4.0 µL  
Detector: FID 160°C  
Injection port temp.: 160°C

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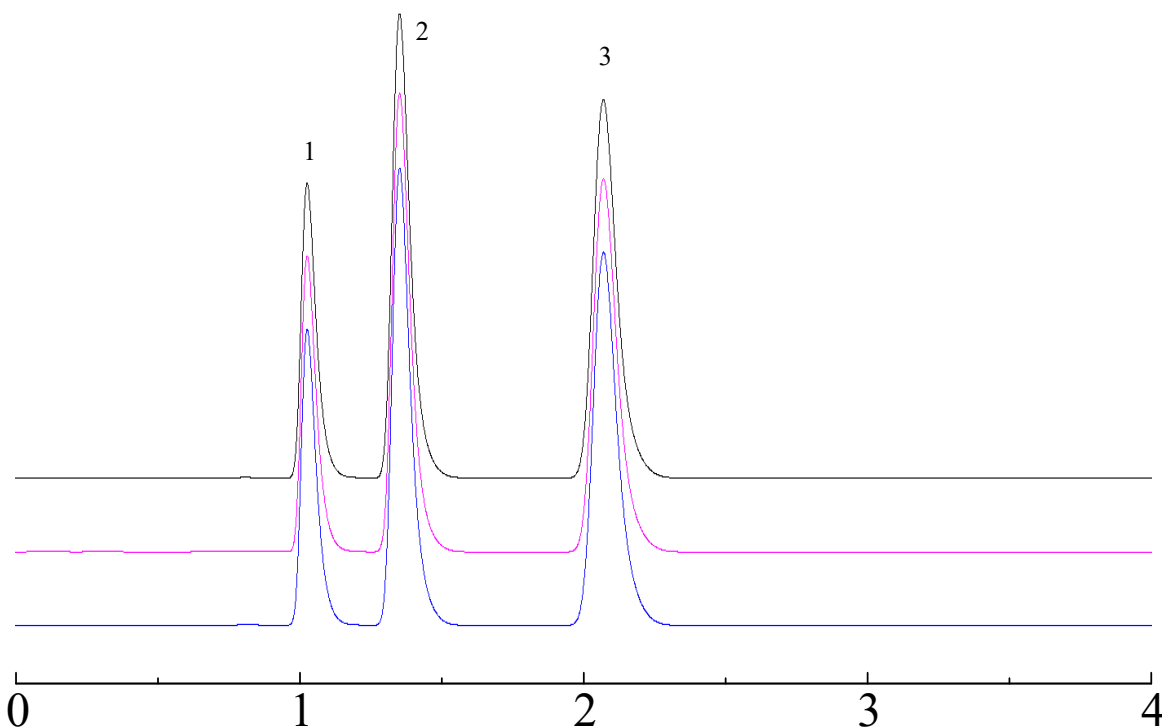
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## Quadrol 5% Shinwasorb-S 60/80

1. Cyclohexane
2. Ethyl acetate
3. 2-propanol



### System suitability

System repeatability: The relative standard deviation is 0.74%

(When the test is repeated 3 times, the relative standard deviation of the ratio of the peak height of ethyl acetate to cyclohexane is not more than 5.0%.)

Column: 3.1 m x 3.2 mm I.D. Glass  
Sample: Cyclohexane, Ethyl acetate, 2-propanol  
Column temp.: 100°C  
Carrier gas: 70 mL/min N<sub>2</sub> (Adjust so that the retention time of cyclohexane is about 1 minute.)

Sample volume: 4.0 µL  
Detector: FID 160°C  
Injection port temp.: 160°C

### ■ Packing material specifications and price ■

Product name	Weight	Price
Quadrol 5% Shinwasorb-S 60/80	25 g	15,100 JPY

### ■ Packed column specifications and price ■

Product name	Column material	Dimensions	Price
Quadrol 5% 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 January 24<sup>th</sup>, 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.