

# SHINWA EXPRESS

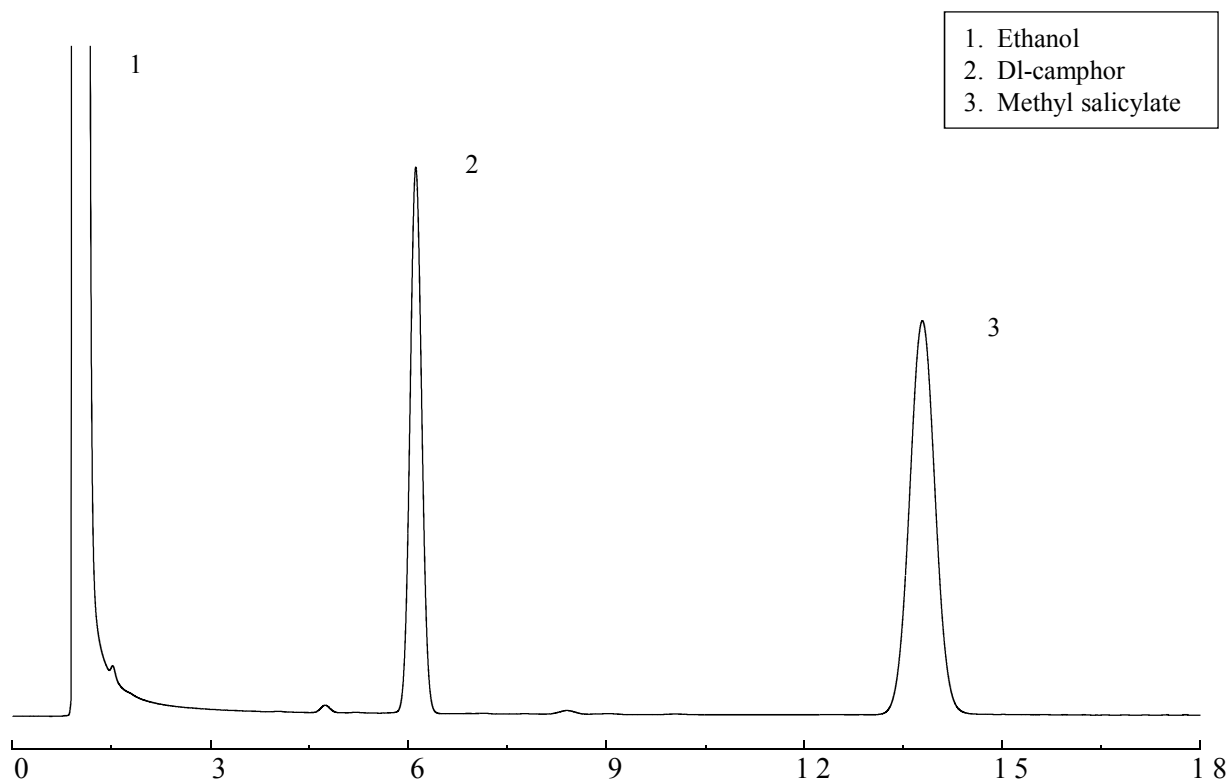
*Application*2016  
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VOL. 84

## Analysis of dl-camphor using Shinwasorb

DL-camphor is used as external medicine for muscle pain, sprain and frostbite. Shown below is an example of dl-camphor using a column packed with a Shinwasorb packing material under Japanese Pharmacopoeia method.

PEG 20M 5% Shinwasorb-S 60/80

**System suitability**

Column performance: The resolution between the dl-camphor and methyl salicylate: 14.8  
(The resolution not less than 7 is acceptable.)

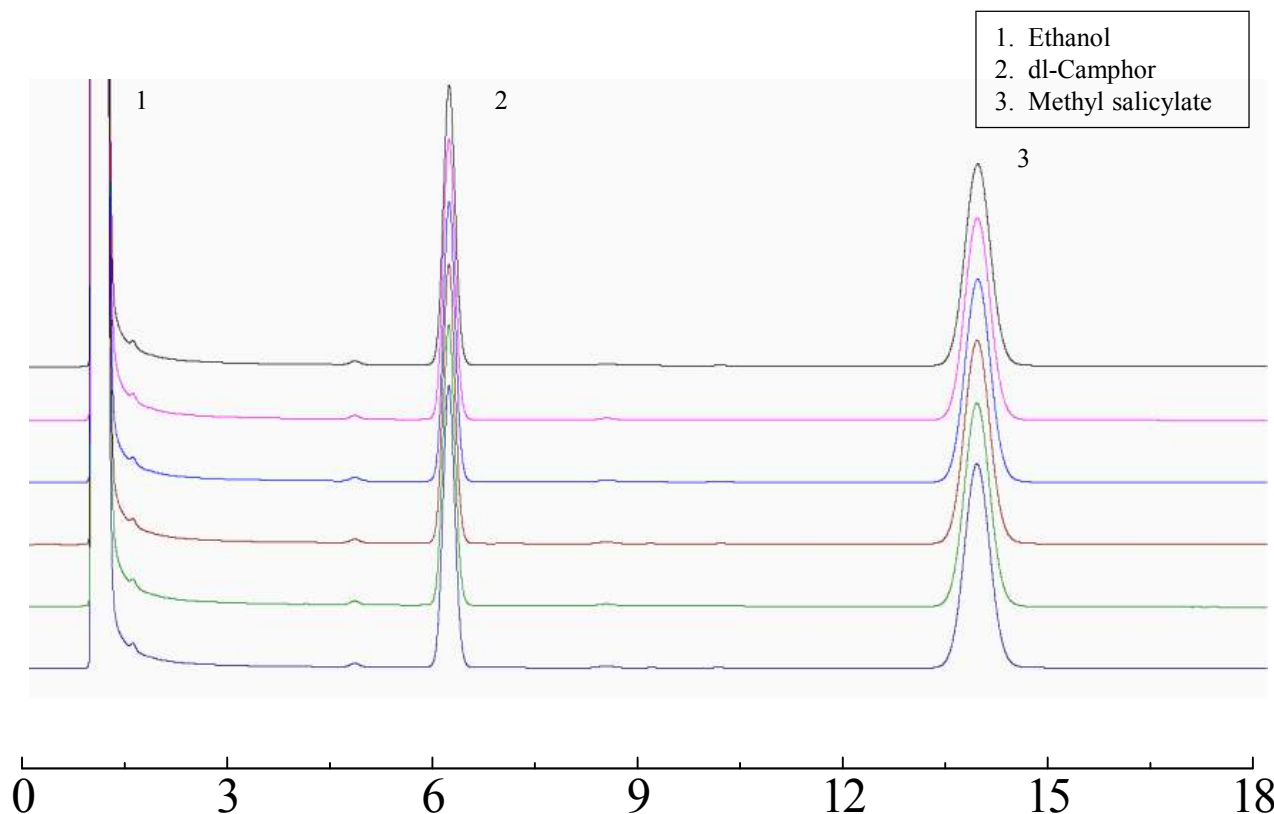
Column: 3.1 m x 3.2 mm I.D. Glass  
Sample: ethanol, dl-camphor, methyl salicylate  
Column temp.: 160°C  
Injection port temp.: 200°C

Sample volume: 2.0 µL  
Carrier gas: 45 mL/min N<sub>2</sub>  
Detector: FID 200°C

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# PEG 20M 5% Shinwasorb-S 60/80



## System suitability

Column performance: relative standard deviation for the peak area of dl-camphor and methyl salicylate is 0.22%  
(The relative standard deviation of the peak areas not more than 1.0% is acceptable.)

Column: 3.1 m x 3.2 mm I.D. Glass  
Sample: ethanol, dl-camphor, methyl salicylate  
Column temp.: 160°C  
Injection port temp.: 200°C

Sample volume: 2.0 µL  
Carrier gas: 45 mL/min N<sub>2</sub>  
Detector: FID 200°C

## ■ Packing material specifications and price ■

Product name	Weight	Price
PEG 20M 5% Shinwasorb-S 60/80	25 g	15,100 JPY

## ■ Packed column specifications and price ■

Product name	Column material	Dimensions	Price
PEG 20M 5% Shinwasorb-S 60/80	Glass (For GC-2014 systems)	2.1 m x 3.2 mm I.D.	60,500 JPY

Prices for stainless columns other than for Shimadzu GC systems will differ from that shown above. The prices shown above are accurate as of May 24th, 2016. 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.