



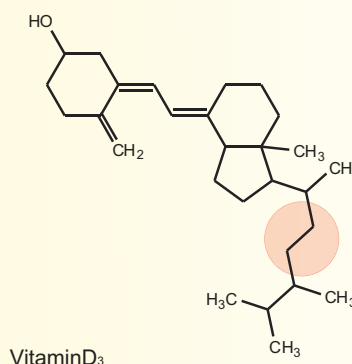
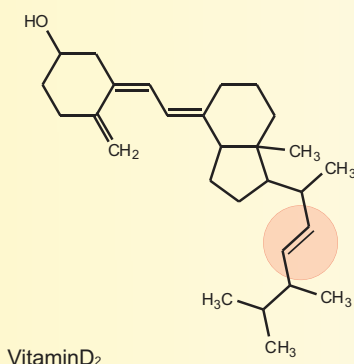
Reversed Phase High Performance Liquid Chromatography

## COSMOSIL Cholester packed column

COSMOSIL Cholester is a Reversed Phase HPLC Column with Cholesteryl bonded silica packing material, which provides equivalent hydrophobicity like that of traditional ODS columns. However, Cholester offers strong stereo selectivity for hydrophobic compounds to yield unique and reproducible separation patterns following the same analytical conditions used with other ODS columns.

### — Features of COSMOSIL Cholester —

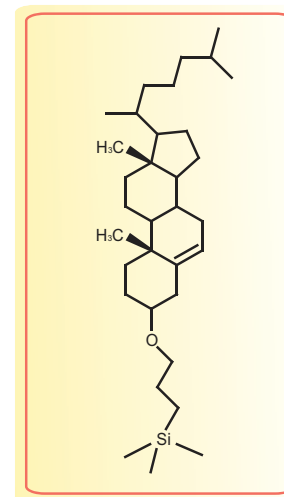
- ★ *Unique rigid cholesteryl structure improves separation*
- ★ *Usable under the same condition as ODS*



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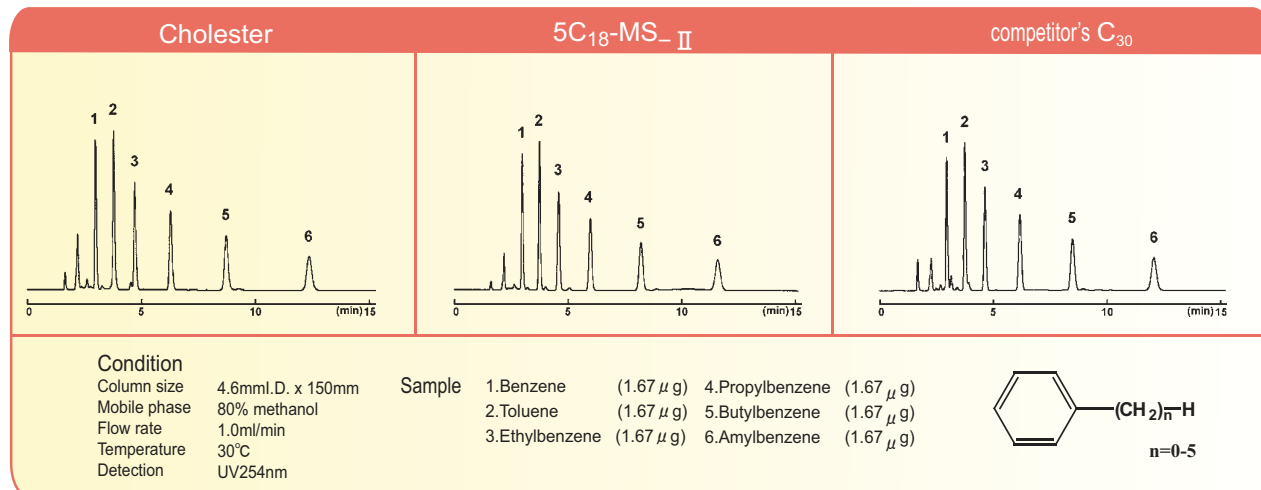
### Material Characteristics

	COSMOSIL Cholester
Silica gel	high purity spherical porous silica
Average particle size	5 μm
Average pore size	approx. 120 Å
Specific surface area	approx. 300 m <sup>2</sup> /g
Stationary phase	Cholesteryl group
Bonded type	Monomeric type
Main interaction	Hydrophobic interaction, Stereoselectivity
End-capping treatment	near-perfect treatment
Carbon content	approx. 20 %



Cholesteryl group

## Separation of Alkylbenzene (comparison of Hydrophobicity)

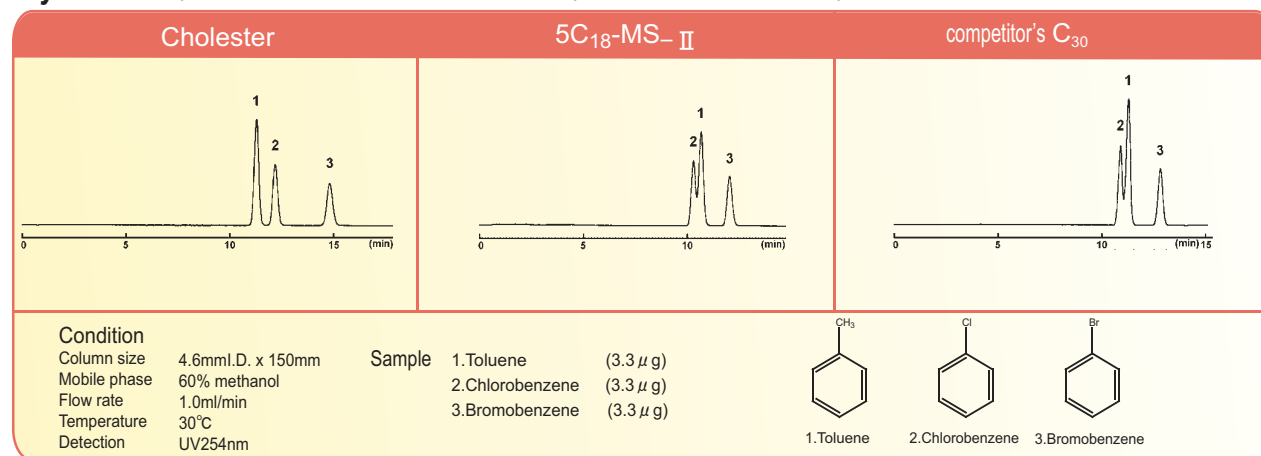


COSMOSIL Cholester provides the same hydrophobicity as ODS and C30 columns.

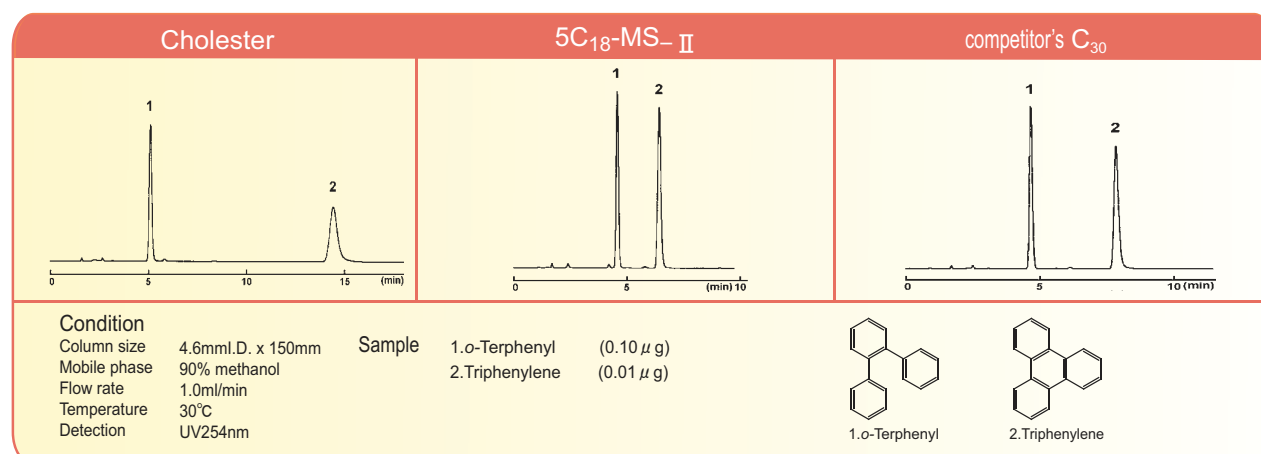
## Characteristics of separation

COSMOSIL Cholester is more selective for Allyl Halides and shows greater stereo selectivity.

## Aryl Halide (Dimension of Electric-Cloud : Methyl &lt; Chlorine &lt; Bromine)

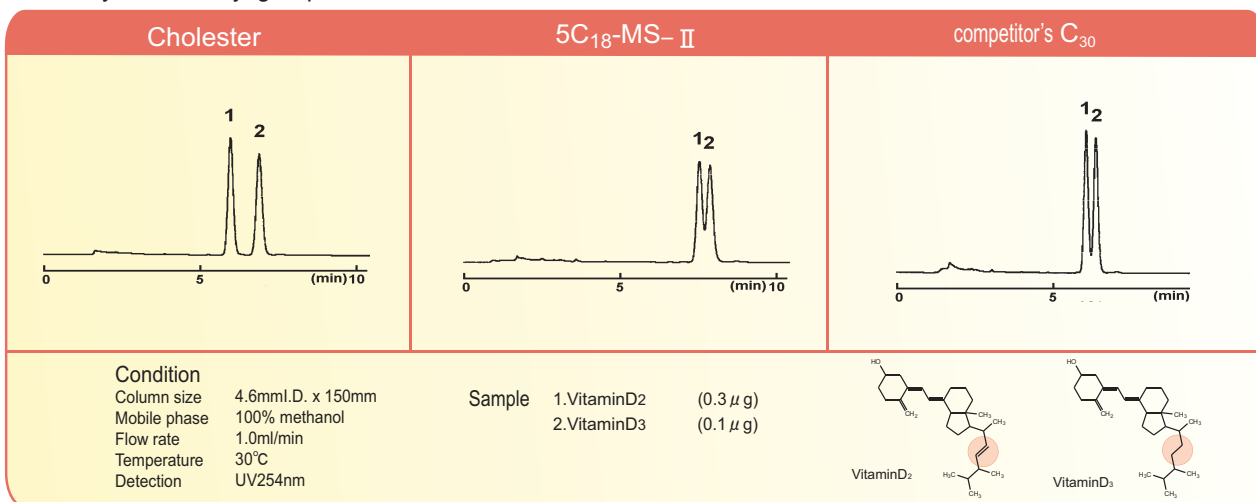


## Stereo Selectivity (Planarity : o-Terphenyl &lt; Triphenylene)



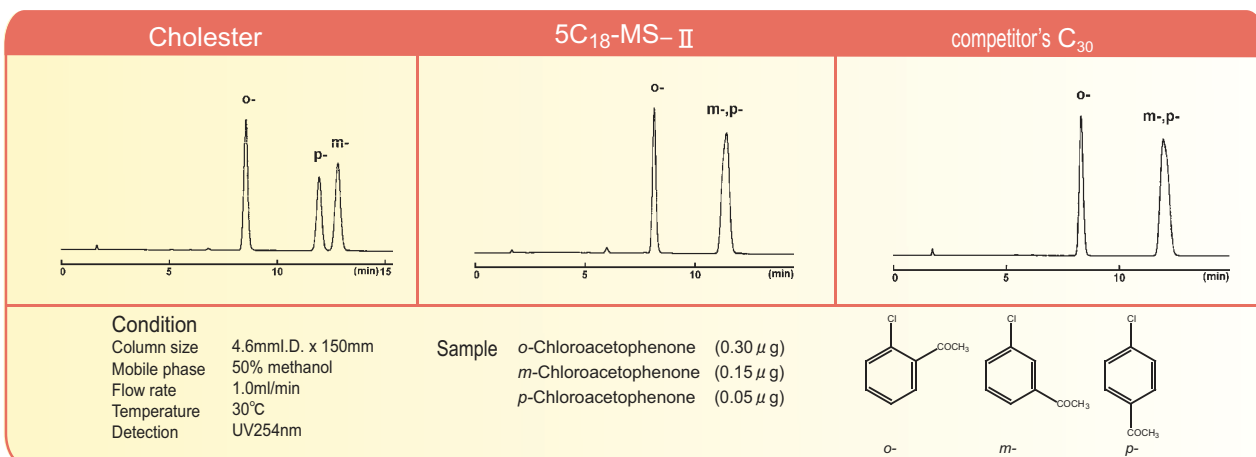
### Structural analog like Vitamin D

Cholesteryl bonded groups are very rigid structures and offer improved separation of compounds that are difficult to analyze with Alkyl group bonded materials.



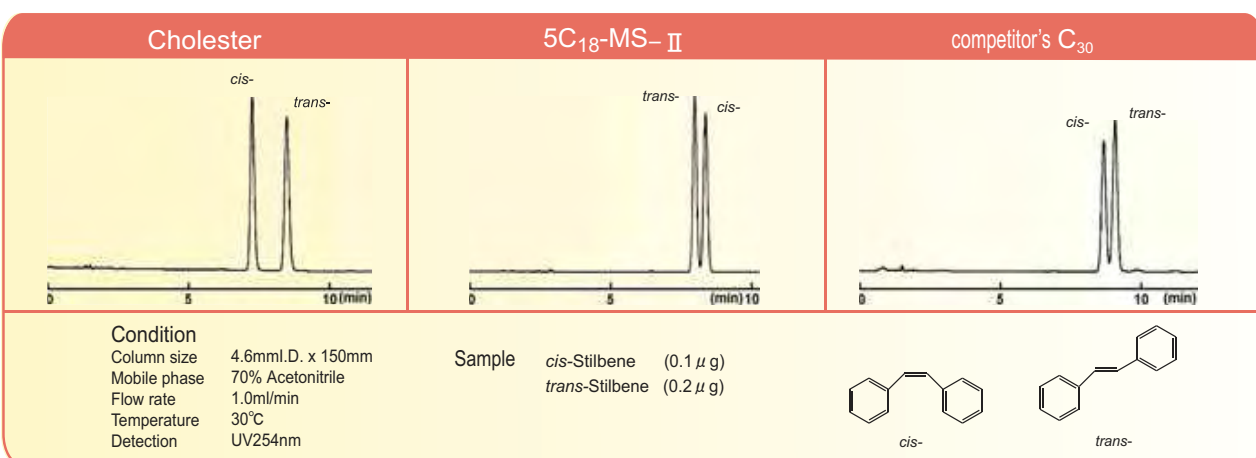
### Positional isomer like Chloroacetophenone

Generally the isomers of disubstituted benzene are difficult to separate with C<sub>18</sub> because the structure and polar characteristics are very similar. In these cases COSMOSIL Cholester works very well.



### Geometrical isomer like Stilbene

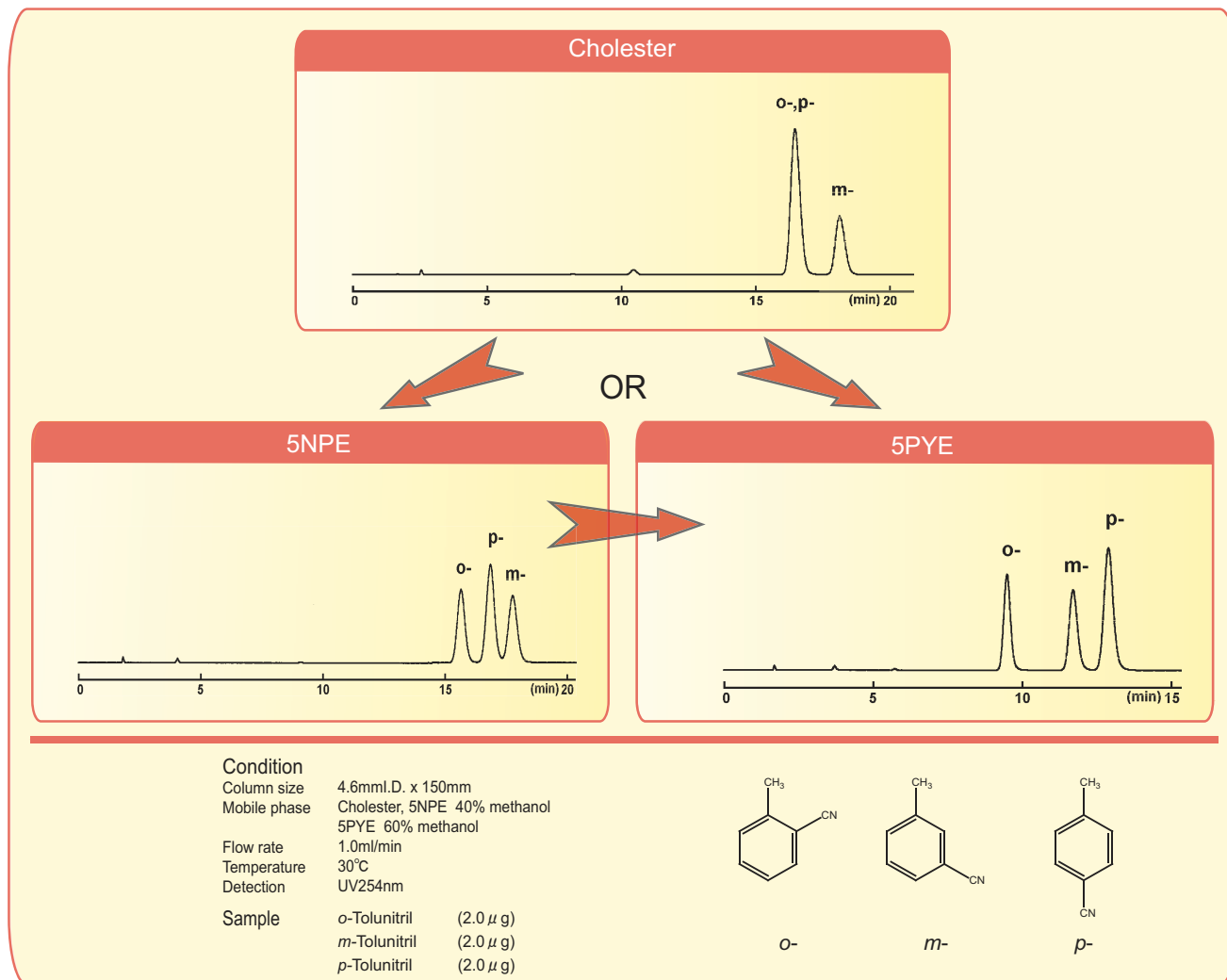
COSMOSIL Cholester offers improved resolution of geometric isomers.



## Further separation

### Positional isomer like Tolunitrile

For positional isomers (e.g. Tolunitrile) that can not be analyzed efficiently with Cholester, the COSMOSIL NPE or COSMOSIL PYE columns offer advanced separation.



## Order Information

COSMOSIL Cholester Guard Column		COSMOSIL Cholester Packed Column			
SIZE	CODE	SIZE	CODE	SIZE	CODE
4.6mm I.D. x 10 mm	05975-71	1.0mm I.D. x 150 mm	05968-71	4.6mm I.D. x 150 mm	05976-61
10.0mm I.D. x 20 mm	05978-41	1.0mm I.D. x 250 mm	05969-61	4.6mm I.D. x 250 mm	05977-51
20.0mm I.D. x 20 mm	05980-91	2.0mm I.D. x 150 mm	05971-11	10.0mm I.D. x 250 mm	05979-31
20.0mm I.D. x 50 mm	05981-81	2.0mm I.D. x 250 mm	05972-01	20.0mm I.D. x 250 mm	05982-71
28.0mm I.D. x 50 mm	05983-61	3.0mm I.D. x 150 mm	05973-91	28.0mm I.D. x 250 mm	05985-41
		3.0mm I.D. x 250 mm	05974-81		

Other sizes may be available. Please enquire!

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