

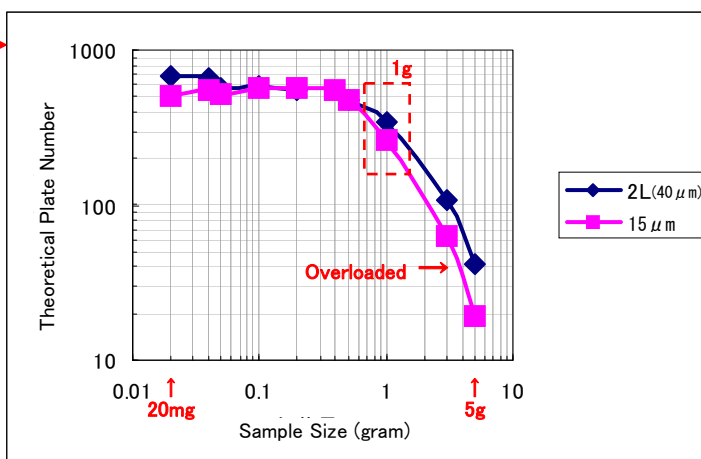
Hi-Flash Column

Comparison between Yamazen's 40um Granular 2L-size (45g) Hi-Flash Column and A Competitor's 15um Spherical 30g Column

Sample Loading Volume and Theoretical Plate Number

Mobile Phase: 86% Hexane/14% Ethyl Acetate
Sample: Dimethyl Phthalate

The larger the sample size, the lower the theoretical plate number of a column. This can be emphasized especially when using a column packed with a small particle size material. When loaded with a 1-gram sample, the theoretical plate number of the Yamazen's 40um granular Hi-Flash column is higher than that of a competitor's 15um spherical column. The 2L Hi-Flash column is very economically priced, yet it assures accurate purifications.



Comparison of Purification Performance between Yamazen's 40um Column and A Competitor's 15um Column – Sample Size and Flow Rate

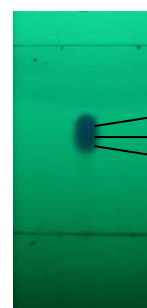
Sample: methyl p-hydroxybenzoate
ethyl p-hydroxybenzoate
butyl p-hydroxybenzoate

Sample load: 60mg in total (20mg ea) or 180mg in total (60mg ea),

Flow rate: 20ml/min or 40ml/min.

Mobile Phase:

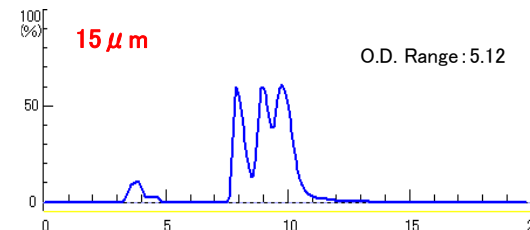
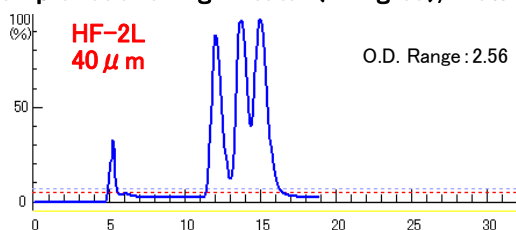
Gradient condition	I	A:Hexane : B:Ethyl acetate	80 : 20
	M1	A:Hexane : B:Ethyl acetate	59 : 41
	M2	A:Hexane : B:Ethyl acetate	0 : 100
	M3	A:Hexane : B:Ethyl acetate	80 : 20



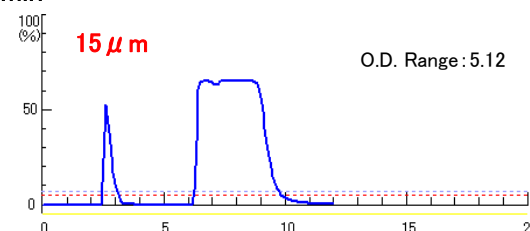
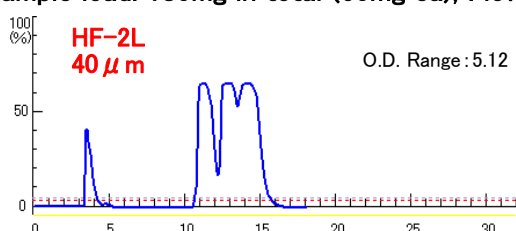
methyl p-hydroxybenzoate
ethyl p-hydroxybenzoate
butyl p-hydroxybenzoate
(Hexane/Ethyl acetate = 70:30)

TLC

① Sample load: 60mg in total (20mg ea), Flow rate: 20ml/min



② Sample load: 180mg in total (60mg ea), Flow rate: 20ml/min



③ Sample load: 60mg in total (20mg ea), Flow rate: 40ml/min

