Develosil TMS, C8, Ph, PhA, NH₂

TMS, C8, Ph,PhA, CN, and NH2 are by the performance from which each differs, they show the separation which was occasionally superior to ODS, and give many information.

Physical Properties of Develosil TMS, C8, Ph, PhA, NH₂

Column name	Ligand	Carbon	End capping	Surface area	Pore Diameter	Pore Volume	Range of pH
TMS	Methyl radical	4%	Yes (Single)	350m²/g	12nm	1.05mL/g	pH2-7.5
C8	Octyl radical	12%	Yes (Single)				
Ph	Phenyl radical	9%	Yes (Single)				
PhA	Phenethyl radical	11%	Yes (Single)				
NH2	Aminopropyl radical	3%	NO				

A separation pattern which is different in ODS!!

Separation comparison at the time of being based on MeOH 70% in an ODS column
In each column, composition is changed so that the retention time of ethylbenzene may be 8.5 minutes.

Separation comparison of the stationary phase for reversed phases
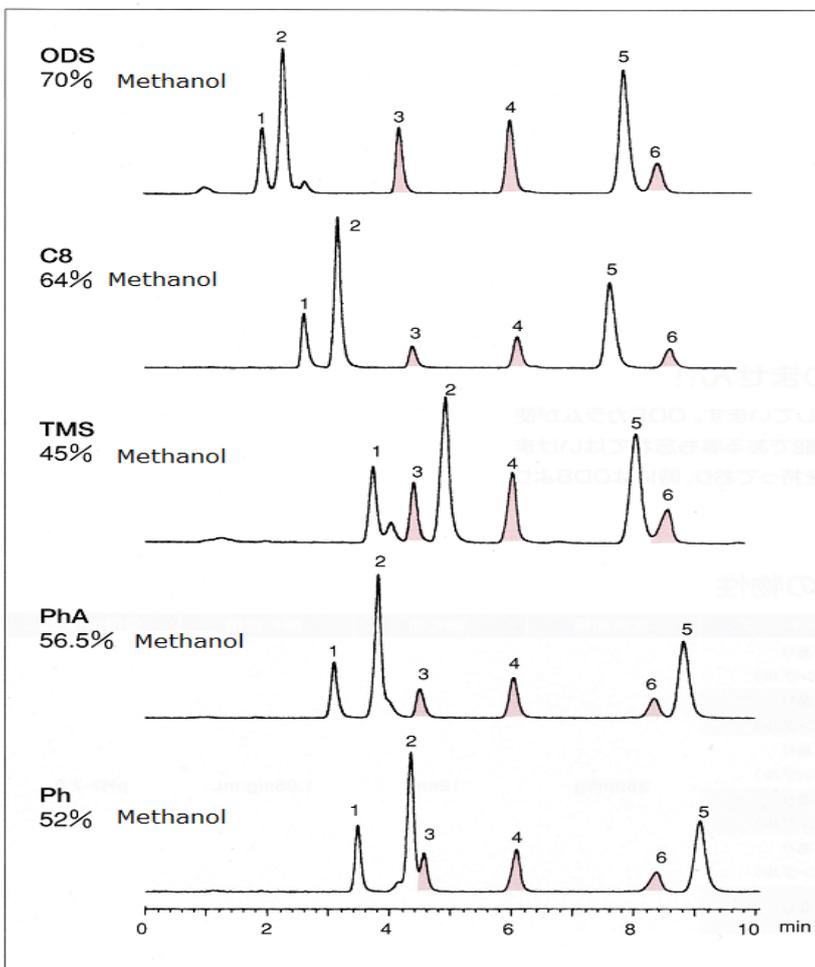
Conditions;
Column : Develosil® ODS-5
Develosil® C8-5
Develosil® TMS-5
Develosil® PhA-5
Develosil® Ph-5
Mobile phase : MeOH/Water
=70/30（ODS-5）
=64/36（C8-5）
=45/55（TMS-5）
=56.5/43.5（PhA-5）
=52/48（Ph-5）
Flow rate : 1.0ml/min
Temperature : 40℃
Detection : UV254nm
Sample : 1.Methyl 4-hydroxybenzoate
2.Ethyl 4-hydroxybenzoate
3.Benzene / 4.Toluene
5.Napthalene / 6.Ethyl benzene

C8 and TMS adjust retention time by increasing water composition with the length of an alkyl chain in comparison with ODS. If it is the same terms, since retention becomes short, it can also be shortened of time only by changing a column.
And, a part of TMS, Ph, and PhA have changed an elution order. Combination holds the influence of a pi electron like naphthalene greatly by using the column of Ph or PhA.
It becomes possible although the width of separation is expanded more by using a column with these features properly.

Analysis of sugar

I am understood widely as HILIC, but this origin is the analysis of the saccharide using the amino column now
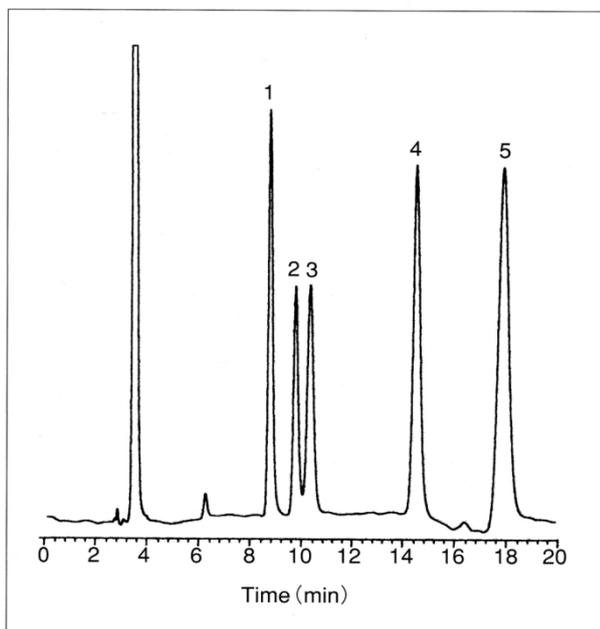
Conditions;

Column	: Develosil® NH$_2$-5
Mobile phase	: Acetonitrile/Water=75/25
Flow rate	: 1.0ml/min
Temperature	: 30℃
Detection	: RI
Sample	: 1.Fructose / 2.Sorbitol / 3.Glucose 4.Sucrose / 5.Maltose