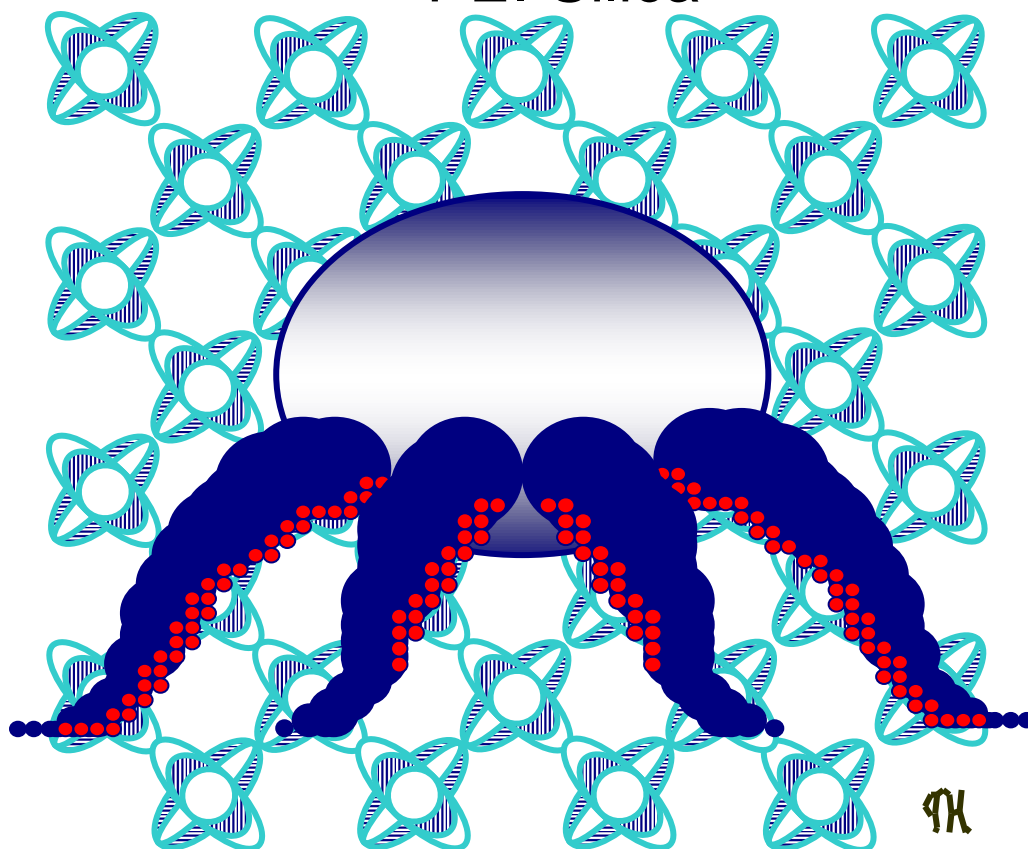


# CHROMATOREX

## Poly-ethylene-imine Silica Gels

*For Strong basic compounds*

PEI Silica



# Introduction

PEI is spherical silica and has macromolecular amino polymer on silica surface. Amino grade such as NH and DNH are used widely from laboratory to industrial field. NH and DNH, especially, use for separation of basic compounds which strongly adsorb on bare silica and/or decompose in contact with bare silica. This time, Fuji Silysia Chemical Ltd. places PEI silica as a new type of amino treatment grade. PEI silica is suitable for the separation of strong basic compound relative to NH and DNH. Fuji Silysia Chemical Ltd. developed for purification in conjunction with conventional amino treatment grade.

## PEI Silica

Three kinds of different particle size grades are assorted based on 10mm pore size spherical silica. Please select from these grades as the application demands.

(Application)

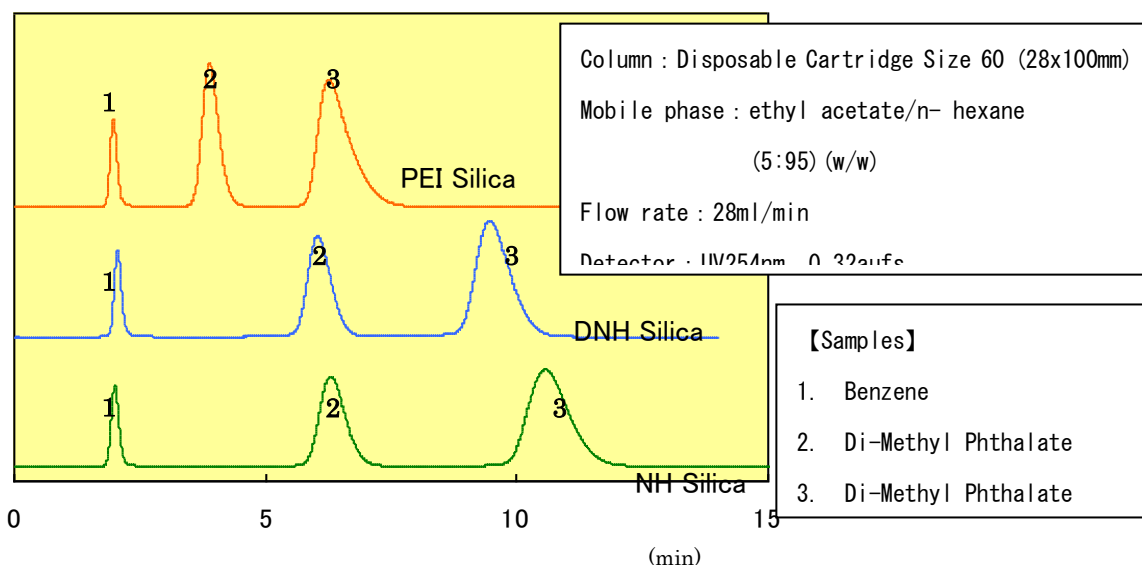
- PEI MB 100-75/200** (A.P.S.110 $\mu$ m) Open column
- PEI MB 100-40/75** (A.P.S.60 $\mu$ m) Flash column, cartridge column
- PEI SMB 100-20/45** (A.P.S.30 $\mu$ m) Cartridge column, HPLC

Surface characteristics of PEI silica



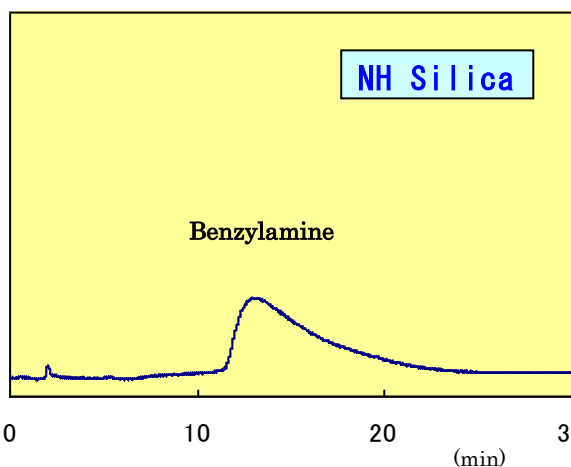
silica modifies with polymer which has the secondary amine and tertiary amine and amino group is threefold of NH silica. For this reason basicity is stronger than NH silica and hydrogen-bonding interaction is weaker than NH silica due to longer carbon chain.

Separation comparison of neutral compounds for NH, DNH, PEI

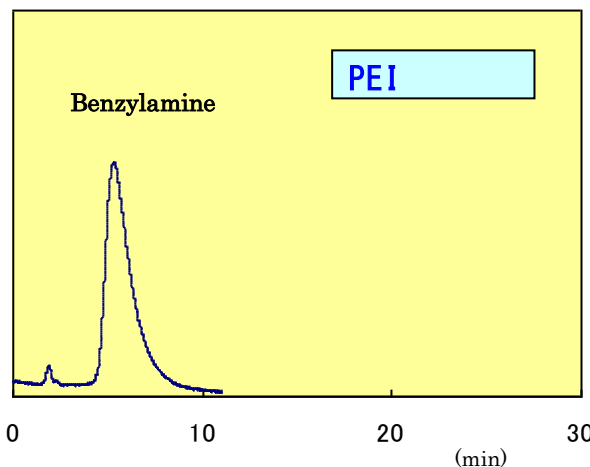


# Applications Comparison Separation of benzylamine

PEI silica is useful to improve asymmetry of basic compound.

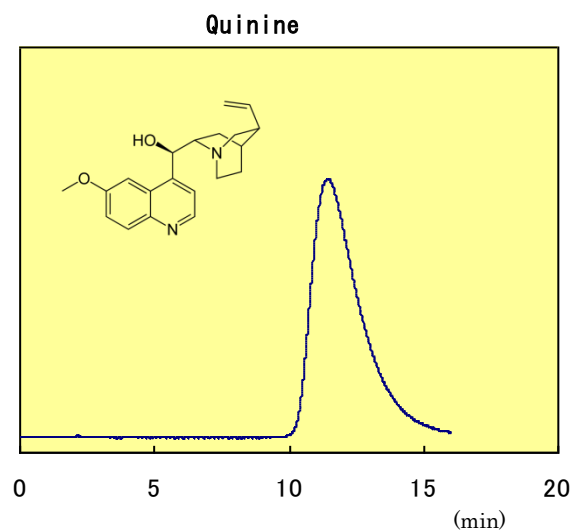


Media : NH SMB 100-20/45  
 Column : Disposable Cartridge Size 60 (28x100mm)  
 Mobile phase : Ethyl acetate/n- hexane (1:1) (v/v)  
 Flow rate : 28ml/min

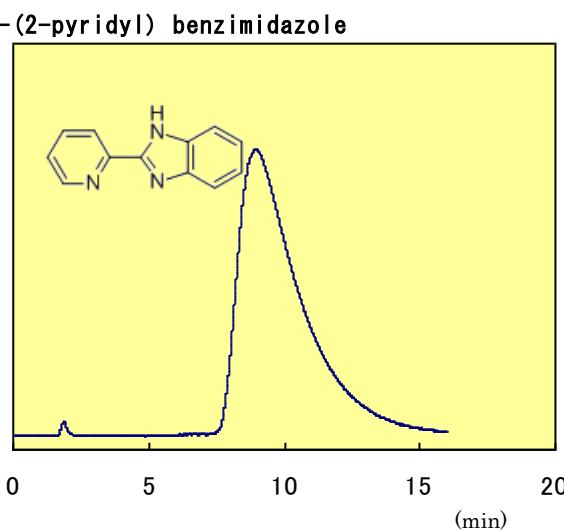


Media : PEI SMB 100-20/45  
 Column : Disposable Cartridge Size 60 (28x100mm)  
 Mobile phase : Ethyl acetate/n- hexane (1:1) (v/v)  
 Flow rate : 28ml/min

# Applications Separation of Alkaloids



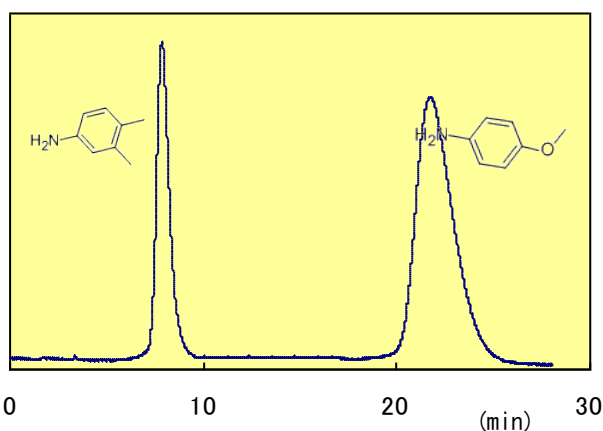
Media : PEI SMB 100-20/45  
 Column : Disposable Cartridge Size 60 (28x100mm)  
 Mobile phase : Isopropanol/n-hexane (1 : 9) (v/v)  
 Flow rate : 28ml/min



Media : PEI SMB 100-20/45  
 Column : Disposable Cartridge Size 60 (28x100mm)  
 Mobile phase : Isopropanol/n-hexane (1 : 9) (v/v)  
 Flow rate : 28ml/min

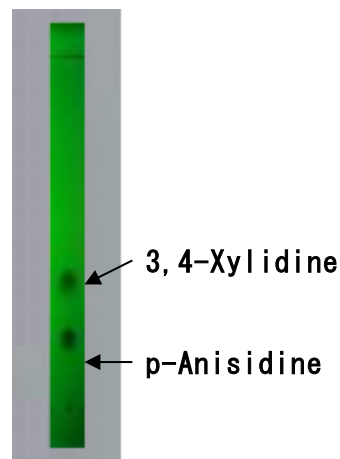
# Applications PEI TLC correlation

Separation for 3,4 Xylidine and p-Anisidine



Media : PEI SMB 100-20/45  
 Column : Disposable Cartridge Size 60  
 (28x100mm)  
 Mobile Phase : Ethyl acetate/n-hexane (1 : 9) (v/v)

PEI TLC / UV254nm



Mobile Phase : Ethyl acetate/n-hexane  
 (1 : 9) (v/v)

## Bulk PEI Silica

Grades	1kg pack	5kg pack
PEI MB100-75/200	Yes	Yes
PEI MB100-40/75	Yes	Yes
PEI SMB100-20/45	Yes	-

## TLC Plates PEI Silica

Grades	Thickness	Plates/Pack
PEI TLC Plates	0.25 mm	10 pieces

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