HICHROM

Chromatography Columns and Supplies

LC CONSUMABLES AND ACCESSORIES Quality Control Test Mixtures

Catalogue 9

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QUALITY CONTROL TEST MIXTURES

Following manufacture, all Hichrom columns are rigorously tested with a quality control sample. It is recommended that the performance of a column is tested on arrival with your own sample or a test mix and also periodically during use. When compared with the initial test chromatogram, the results can be used to monitor any loss in column performance over time. Five quality control test mixtures are available.

Test Mixtures

Test mixture / Component	Concentration				
	A	B	C	D	E
Acetone	-	-	100µl/ml	-	-
Dimethyl phthalate	2.4µl/ml	2.4µl/ml	-	-	-
Toluene	16µl/ml	16µl/ml	16µl/ml	-	-
Biphenyl	280µg/ml	200µg/ml	200µg/ml	-	-
Phenanthrene	200µg/ml	-	-	-	-
Butylbenzene	-	-	-	12µl/ml	12µl/ml
Methyl benzoate	-	-	-	4µl/ml	-
Nitrobenzene	-	-	-	0.24µl/ml	0.24µl/ml
Typical use	C18 Reversed-phase columns	C4, C6 and C8 Reversed-phase columns	C1 and Phenyl Reversed-phase columns	Normal-phase columns	Normal-phase columns that show insufficient separation of methyl benzoate
Sample solvent	$CH_3OH - H_2O$ (85:15)	$CH_3OH - H_2O$ (75:25)	$CH_3OH - H_2O$ (75:25)	Heptane – Ethyl acetate (90:10)	Heptane – Ethyl acetate (90:10)

Test Conditions

Eluent: As sample solvent, or as specified on original chromatogram
Flow rate: 1ml/min or as specified on original chromatogram
UV wavelength: 254nm
Injection volume: Typical injection volume is 2µl for a 250 x 4.6mm i.d. column. Standard dome tipped syringes may be used to pierce the septum cap of the vial

Typical reversed-phase (Figure 1) and normal-phase (Figure 2) chromatograms are shown below for a 250 x 4.6mm i.d. column.

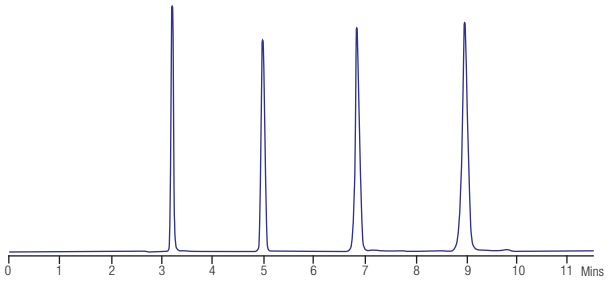

Figure 1. Chromatogram of test mixture A

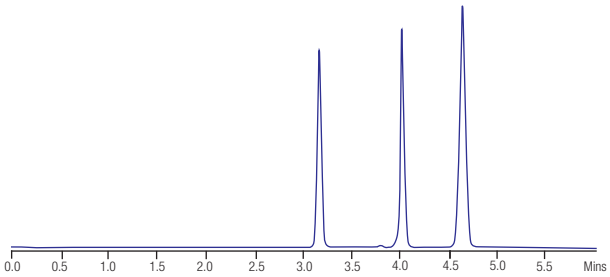

Figure 2. Chromatogram of test mixture D

Stability

Once the seal has been broken, the test mixture should last for one week. It is occasionally necessary to add eluent to replace any that evaporates from the test mixture. The toluene component is particularly volatile. The test mixture will last longer by enclosing the vial in a further airtight container and/or refrigerating.

Ordering Information

Test Mixture (1ml)	Catalogue Number	Price
A	TMA	
B	TMB	
C	TMC	
D	TMD	
E	TME	

Please contact our technical department for a free trial sample of test mixtures