

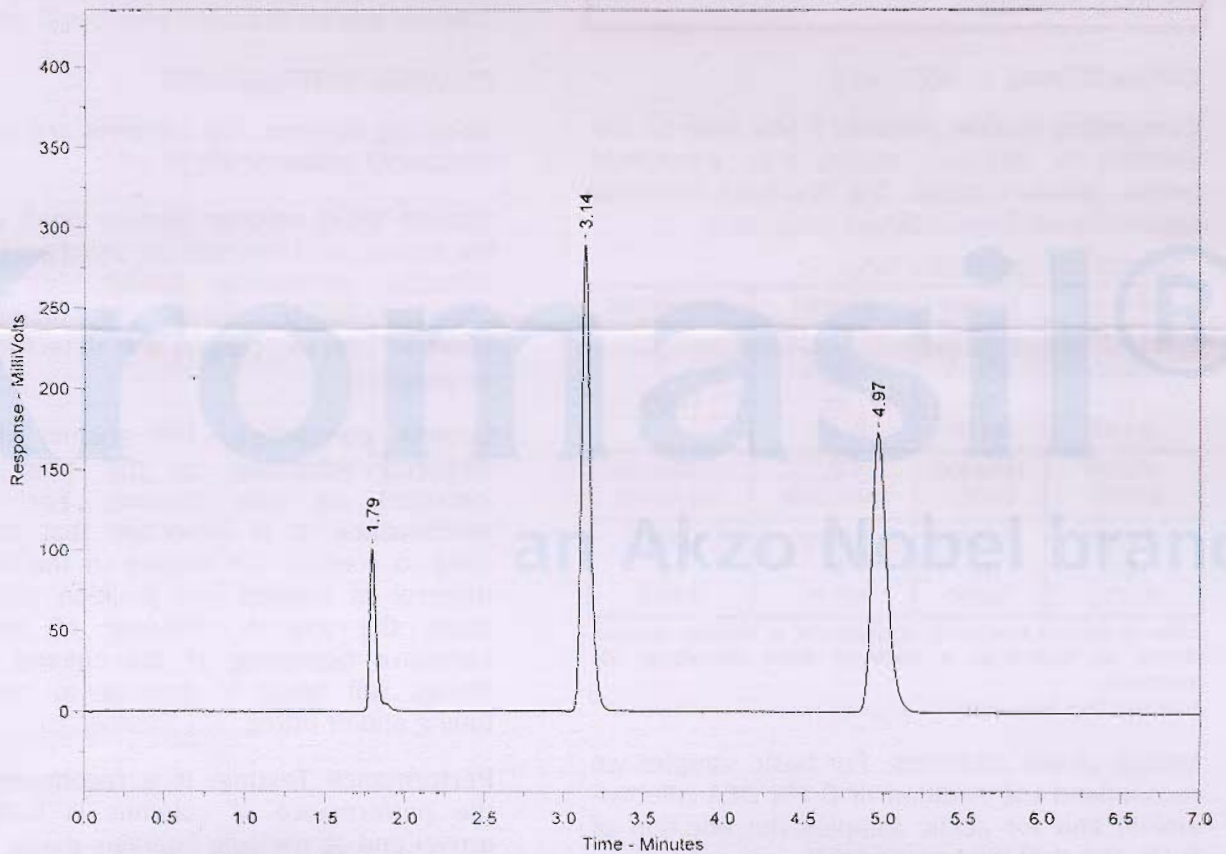
Test Chromatogram

PRODUCTS DETAILS

Packing:	Kromasil 3-CelluCoat	Serial Number:	81152
Length:	150 mm	Batch Number:	CT 8032
i.d.:	4.6 mm		

TEST CONDITIONS

Mobile Phase:	Heptane/2-Propanol (90/10)	Flow Rate:	1 ml/min
Storage Solvent:	Mobile Phase	Wavelength:	229 nm
Test Substance:	trans-Stilbene oxide	Pressure:	64 bar
Void Marker:	tri-tert-Butylbenzene		



COLUMN PERFORMANCE

Peak	Ret. time	Efficiency	Asymmetry	k'	Selectivity
1	1.795	10600	1.76		
2	3.137	15500	1.40	0.75	
3	4.970	13600	1.54	1.77	2.37

Care and Use of Kromasil® CelluCoat™ HPLC Columns

Please read this information carefully before using the column.
All Kromasil columns are individually manufactured and tested to meet strict specification criteria. The following measures will maintain their performance and lifetime.

IMPORTANT

The entire HPLC system, including solvent lines, injector, loops or autosampler has to be purged with a solvent compatible with the Kromasil CelluCoat column. A thorough instrument purge with 2-propanol is recommended. Solvents commonly used for other Normal Phase separations, such as e.g. THF, dichloromethane, DMSO, DMF, ethyl acetate, acetone or chloroform will severely damage the Kromasil CelluCoat column even at residual quantities.

OPERATIONAL GUIDELINES

Compatible mobile phases: If you wish to use solvents or additives others than mentioned below, please consult the Kromasil technical support team (kromasil@eka.com) first.

Solvent compatibility (v/v)

alkane/ 2-propanol	alkane/ ethanol	alkane/ methanol ¹	acetonitrile
100/0 to 0/100	100/0 to 0/100	100/0 to 0/100	100%
alkane/ MTBE ²	ethanol/ MTBE ²	CO ₂ / methanol	acetonitrile/ methanol
100/0 to 50/50	100/0 to 50/50	100/0 to 80/20	100/0 to 85/15

¹: due to limited miscibility of methanol in alkanes, ethanol should be added as a mediator when exceeding 5% methanol.

²: Methyl tert-butyl ether

Mobile phase additives: For basic samples we recommend the addition of 0.1% DEA (diethylamine) and for acidic samples the addition of 0.1% TFA (trifluoroacetic acid).

Switching between mobile phases: Generally, no intermediate column wash with 100% 2-propanol is necessary when switching from one mobile phase to another. Adequate equilibration times, depending on column size, are given in the table below. Adjust flow rates to fulfill the time and column volume requirements. The given equilibration times are indicative, stable base line should always be reached before a separation is started.

Equilibration time for 15-20 column volumes

Column length [mm]	50	150	250
Minimum equilibration time [min]	15	45	75

Flow rate and pressure limitation: There are no specific pressure drop limits for the Kromasil CelluCoat columns. They can be operated up to the common pressure drop limits of most HPLC instruments, 400 bar.

Temperature limits: The Kromasil CelluCoat columns can be operated between 0 and 40 °C.

COLUMN INSTALLATION

Shipping solvent: The columns are shipped in heptane/2-propanol 90/10 (v/v).

System dead volume: Reduce dead volume in the system to a minimum by using small internal diameter connection tubing, for analytical columns 0.010". Keep the tubing length between injector, column and detector as short as possible.

Column connection: The column should be mounted according to the flow direction indicated on the column. For optimum performance, it is important that the tubing used to connect the column to the injector or detector is swaged into position such that it abuts the internal shoulder of the fitting. Excessive tightening of the column end and fittings will result in damage to the column tubing and/or fitting.

Performance Testing: It is recommended that the performance of columns is tested upon arrival and at periodic intervals during use. The test conditions are described on the test chromatogram.

Mechanical damage: Protect the column from mechanical shock. Dropping or banging a column can impair its performance.

Storage: Wash out all additives with a neutral mobile phase such as heptane/2-propanol 90/10 (v/v). Close the column openings with the end-caps in order to prevent the packing from drying out and keep the column at ambient temperature (15-25°C).