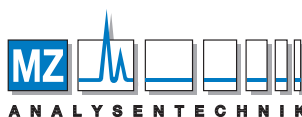


AZYP Chiral Columns

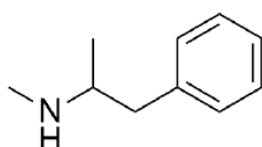
Methamphetamine Separation



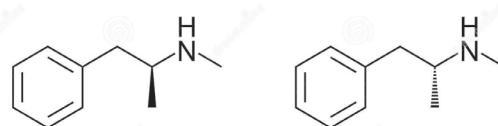
AUTHORIZED DISTRIBUTOR

MZ-Analysentechnik GmbH, Barcelona-Allee 17 • D-55129 Mainz
 Tel +49 6131 880 96-0, Fax +49 6131 880 96-20
 e-mail: info@mz-at.de, www.mz-at.de

Methamphetamine is a Schedule II stimulant that exists in two enantiomeric forms. Dextromethamphetamine (the D-isomer) is the more biologically potent form and is often illegally trafficked for recreational use, while levomethamphetamine (the L-isomer) is the active ingredient in certain over-the-counter nasal decongestants. Determination of actual drug abuse is therefore complicated because routine methods of analysis, like immunoassays, are often incapable of distinguishing the enantiomers. HPLC methods using common functionalities such as C18 are attractive, but are incapable of resolving optical isomers without derivatizing samples with chiral reagent prior to analysis. Chiral HPLC, on the other hand, requires no such derivatization step. AZYP VancoShell columns, featuring the chiral vancomycin selector bound to high-efficiency 2.7- μm core-shell particles, are capable of baseline resolving the enantiomers of methamphetamine in less than 5 minutes.



Methamphetamine



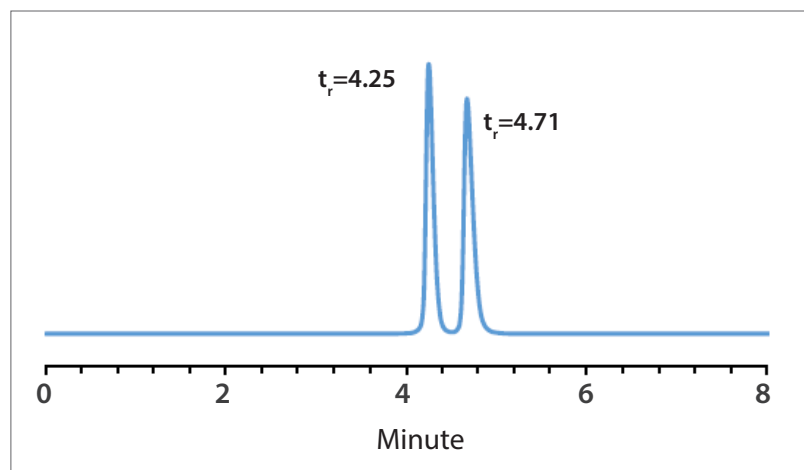
D-Methamphetamine

L-Methamphetamine

Methamphetamine

 $\text{C}_{10}\text{H}_{15}\text{N}$

Test Conditions	
Column	AZYP VancoShell Column
Dimensions	100 x 4.6 mm, 2.7 μm
Mobile Phase	(100/0.1/0.05) Methanol/ Acetic Acid/Triethylamine
Flow Rate	1.0 mL/min
Temperature	Ambient (23° C)
Injection Volume	1.0 μL
Detection	UV 220 nm
Resolution	2.73



Column Used in This Application

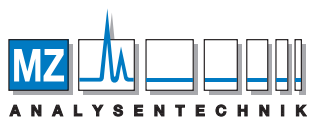
Column	Dimensions	Particle Size	Catalog Number
AZYP VancoShell	100 x 4.6 mm	2.7 μm	1-880285-300



For more information about AZYP chiral columns, visit registech.com/azyp-chiral-phases or email a REGIS Chromatography Sales Representative at chromsales@registech.com for a personalized quote.

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