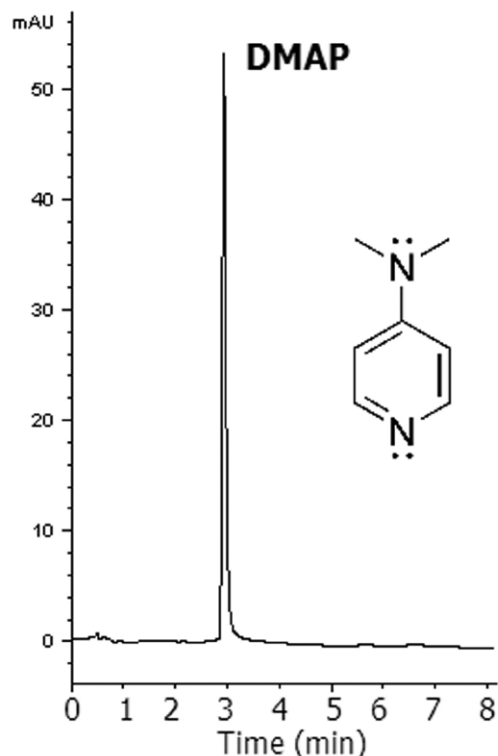


## Analyzing the Catalyst DMAP 4-Dimethylaminopyridine by HPLC



### Method Conditions

<b>Column:</b>	Cogent Diamond Hydride™ 4µm, 100Å.
<b>Catalog No.:</b>	70000-7.5P
<b>Dimensions:</b>	4.6 x 75 mm
<b>Mobile phase:</b>	90% A/10%B ( <i>isocratic</i> )
<b>Solvents:</b>	A: DI water+ 0.05% TFA B: Acetonitrile
<b>Flow rate:</b>	2.0 mL/min.
<b>Injection Volume:</b>	10 microL
<b>Peak:</b>	DMAP (4-Dimethylaminopyridine)
<b>Sample Preparation:</b>	1 mg/mL prepared in 50%A/50%B
<b>Detection:</b>	UV 280 nm

### Discussion

A rapid, reliable, isocratic reverse phase HPLC method was developed for the analysis of an important catalyst to many industries: 4-Dimethylaminopyridine (DMAP).

For more information visit [www.MTC-USA.com](http://www.MTC-USA.com)

#### Notes:

DMAP is an important catalyst to many industries including the pharmaceutical industry which uses it to synthesize many new drugs. It is used in picolinyl derivatization (esterification with picolinic acid) of steroids for LC-MS-MS analysis; the ethyl ether-picolinyl derivatization provides an approximately 10-fold higher ESI response in the positive-LC-ESI-MS/MS (selected reaction monitoring; SRM) when compared to that of underivatized steroid molecules. Pre-column derivatization of T-2 and HT-2 toxins (Fusarium mycotoxins that can occur in cereals and cereal-based products) with fluorescent labeling reagents is carried out in toluene with DMAP as a catalyst. 4-dimethylaminopyridine is also used in accelerated synthesis of heroin from morphine. In comparison with classic acetylating procedures, reaction time is reduced from several hours at elevated temperatures to <10min at room temperature when DMAP is used as a catalyst.

Cat. No.	Description
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70000-7.5P	Cogent Diamond Hydride™ HPLC Column, 100Å, 4µm, 4.6 x 75mm
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