

# Application Report 327

## Analysis of Antifungal Agents Using Ascentis™ RP-Amide

The Ascentis RP-Amide is used in the analysis of antifungal agents used in the treatment of nail and skin infections. They include ciclopirox, terbinafine, tioconazole and ketoconazole. Structures and an optimized chromatogram following gradient elution is presented.

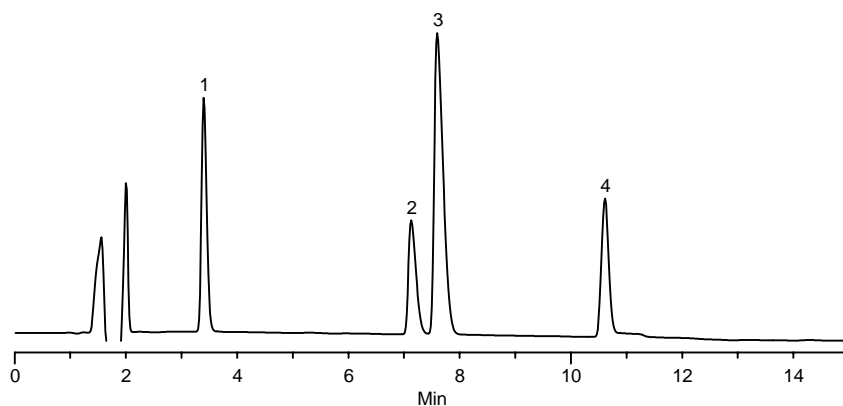
### Key Words

Ascentis RP-Amide, 565324-U, ciclopirox olamine, ketoconazole 65277-42-1 K1003, tioconazole 65899-73-2 66743, terbinafine HCl 78628-80-5 T2068

Author: Jacinth A.M. McKenzie

Acquisition System: Waters Mt Hoyt

Notebook Reference: 1576



G003261

### Conditions

column: Ascentis RP-Amide, 15 cm x 4.6 mm I.D., 5 µm particles (565324-U)  
mobile phase A: 10 mM ammonium formate (pH 2.9 with formic acid)  
mobile phase B: acetonitrile  
flow rate: 1.0 mL/min.  
temp.: 35 °C  
det.: UV at 240 nm  
injection: 20 µL  
sample: as indicated in 10 mM ammonium formate (pH 2.9 with formic acid)

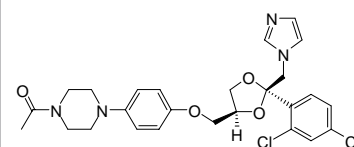
gradient:	Min	%A	%B
	0	65	35
	10	55	45
	12	55	45
	12.1	65	35

### Peak IDs

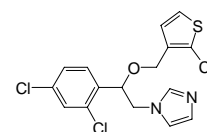
1. Ketoconazole (50 µg/mL)
2. Tioconazole (50 µg/mL)
3. Terbinafine (50 µg/mL)
4. Ciclopirox (150 µg/mL)

### Structures

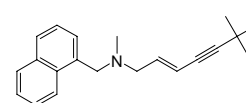
Ketoconazole - G003254



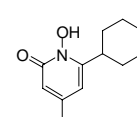
Tioconazole - G003252



Terbinafine - G003253



Ciclopirox - G003260



Ascentis is a trademark of Sigma-Aldrich Co.