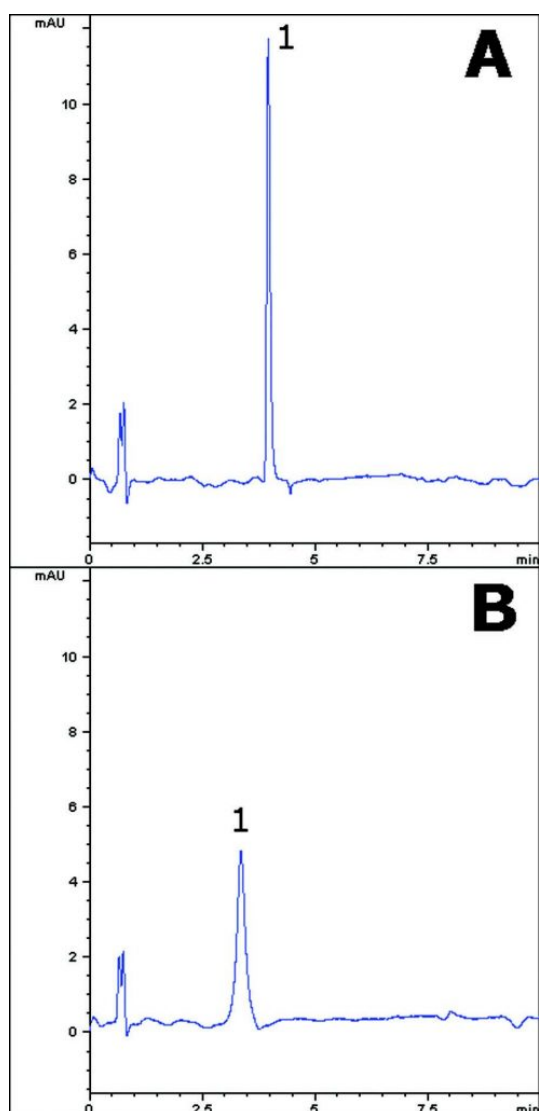


## Alprazolam (Xanax®) HPLC Method Transferred – AppNote

### Benefit of 2.2µm Column Analyzing Alprazolam by HPLC

In this AppNote, we show that a transfer from a 4µm to 2.2µm Column, higher efficiency is observed with the smaller particle size Column. This can be very useful for analyses requiring detection at low concentrations.

The Peak shape is very sharp using the 2.2µm Column (*Figure. A*) and is further sharpened with the use of a gradient. Furthermore, the method conditions are LCMS compatible and could be applied to a variety of applications involving Alprazolam analysis such as clinical assays of Plasma extracts.



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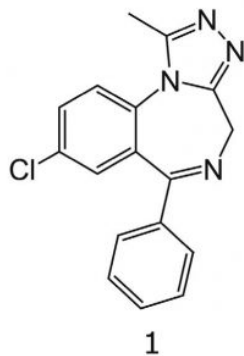
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## Peak:

Alprazolam (API)

## Method Conditions

### Columns:

Fig. A: Cogent Diamond Hydride 2.0™, 2.2μm, 120Å

Fig. B: Cogent Diamond Hydride™, 4μm, 100Å

### Catalog Nos.:

Fig. A: 70200-05P-2;

Fig. B: 70000-05P-2

### Dimensions:

Fig. A: 2.1 x 50 mm

Fig. B: 4.6 x 50 mm

### Mobile Phase:

A: DI Water / 0.1% Formic Acid (v/v)

B: Acetonitrile / 0.1% Formic Acid (v/v)

### Gradient:

Time (minutes)	%B
0	95
1	95
6	50
7	95

**Post time:** 3 minutes

**Injection vol.:** 0.2 μL

**Flow rate:** 0.29 mL / minutes

**Detection:** UV @ 254 nm

**Sample:** 15 mg strength Morphine Sulfate tablet was ground and weighed in a 25 mL Volumetric Flask. A portion of 50 / 50 solvent A / solvent B diluent was added and the flask was sonicated for 10 minutes. It was then diluted to mark and filtered with a 0.45μm Nylon Syringe Filter (MicroSolv Tech Corp.).

**t<sub>0</sub>:** 0.6 minutes

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## Attachment

No 309 Alprazolam Xanax Method Transfer pdf 0.3 Mb [Download File](#)

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