

# NEW! Fisher Chemical UHPLC-MS Solvents

Ultra high purity solvents linked directly to the sensitivity of the mass spectrometer that minimizes chromatographic interferences.

Fisher Chemical has developed a new solvent grade, UHPLC/MS Optima™, for mobile phases targeting trace analysis by UHPLC/MS.

These ultra-pure solvents will provide a very low mass noise level in both positive and negative mode ionization, minimal metal ion content, and very low UHPLC/UV response using photo diode array detection. Fisher Chemical's high purity solvents are specifically qualified for UHPLC-MS and offered in Acetonitrile, Methanol, and Water.

Solvent	Pack size	Packaging	Catalog Number
Acetonitrile	1L	Borosilicate Glass	A956-1
Methanol	1L	Borosilicate Glass	A458-1
Water	1L	Borosilicate Glass	W8-1



## Why Fisher Chemical UHPLC-MS Optima™ Solvents?

- New solvent specification based on S/N ratio of the propazine product ion from MS/MS fragmentation.  
**Benefit: The solvent quality of UHPLC-MS Optima solvents is linked directly to the sensitivity of the detector (mass spectrometer); unique specification for the chemical industry.**
- 0.1 micron filtration for Acetonitrile and Methanol, 0.03 micron filtration for Water.  
**Benefit: Submicron filtration ensures minimal clogging of instrument, columns and check valves.**
- Reduces significantly the leaching of metal cations (Na<sup>+</sup> and K<sup>+</sup>).  
**Benefit: Low metal content in mobile phase solvents minimizes formation of metal ion adducts.**
- Fisher Chemical UHPLC-MS solvents have an LC-UV Gradient Suitability specification which is tested in the full 200–400 nm range.  
**Benefit: Mobile phase solvents have minimal UV-absorbing impurities providing customers with smooth baselines with minimal interference (a smooth baseline in chromatogram with minimal interference).**
- Convenient 1 L bottle borosilicate glass design accommodates mobile phase as bottle can sit on top of UHPLC-MS instrument.  
**Benefit: Ease of use directly on instrument.**

## Did You Know

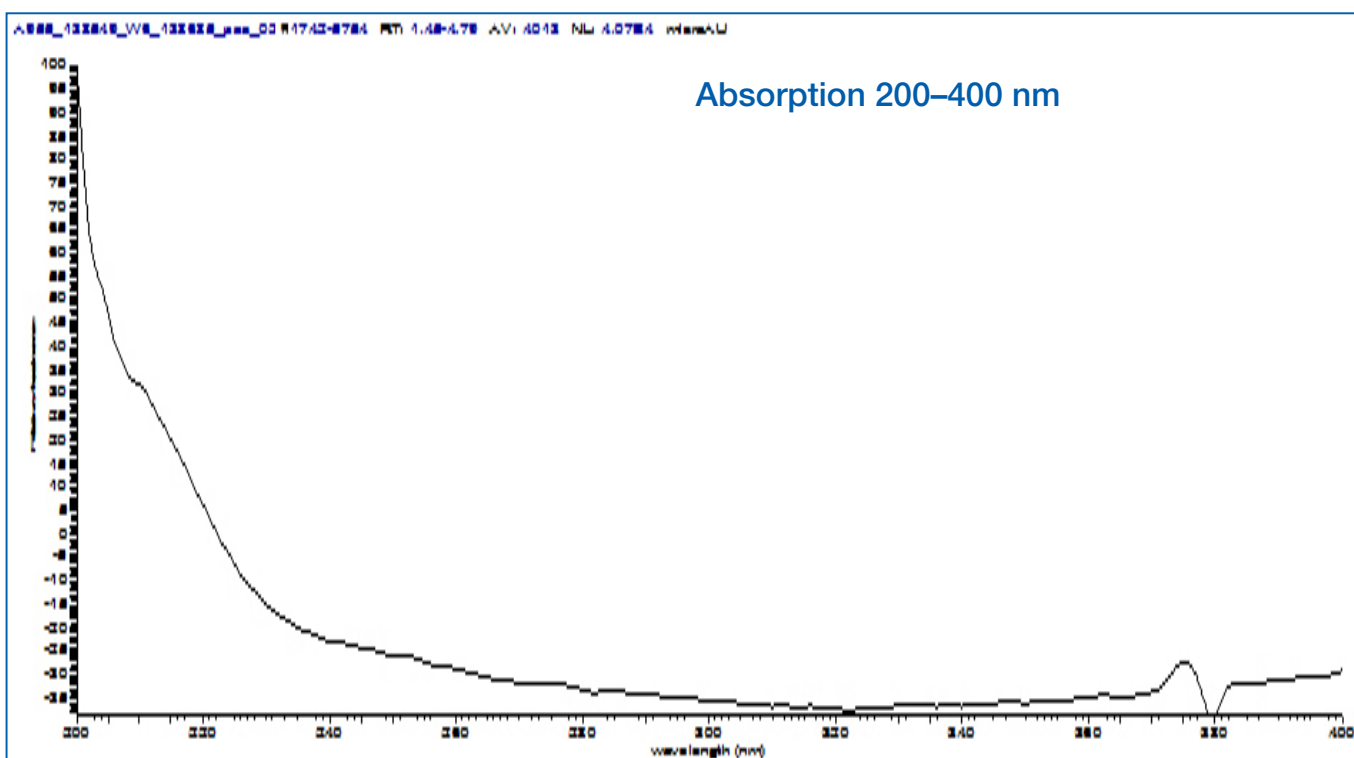
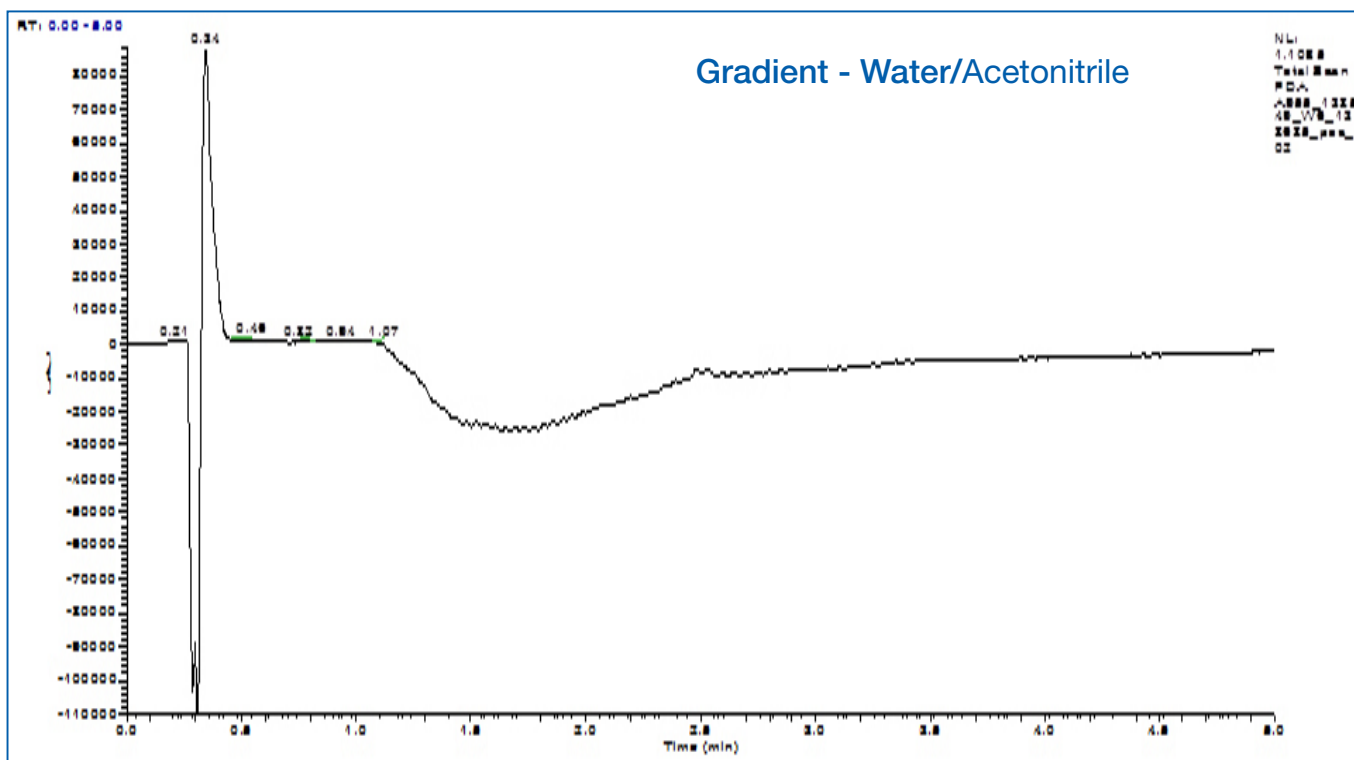
Ultra High Performance Liquid Chromatography (UHPLC) performs separations 5 to 10 times faster than conventional HPLC by employing sub-2 µm diameter particles? The 1-2 second peak widths and relatively high separation efficiency of UHPLC are more competitive with capillary GC, making UHPLC-MS an attractive method for illicit drug analysis.

# Fisher Chemical UHPLC-MS Optima™ solvents for mobile phases support interference-free analytical work:

## UHPLC-UV Gradient Suitability Test

### UHPLC-UV Specification

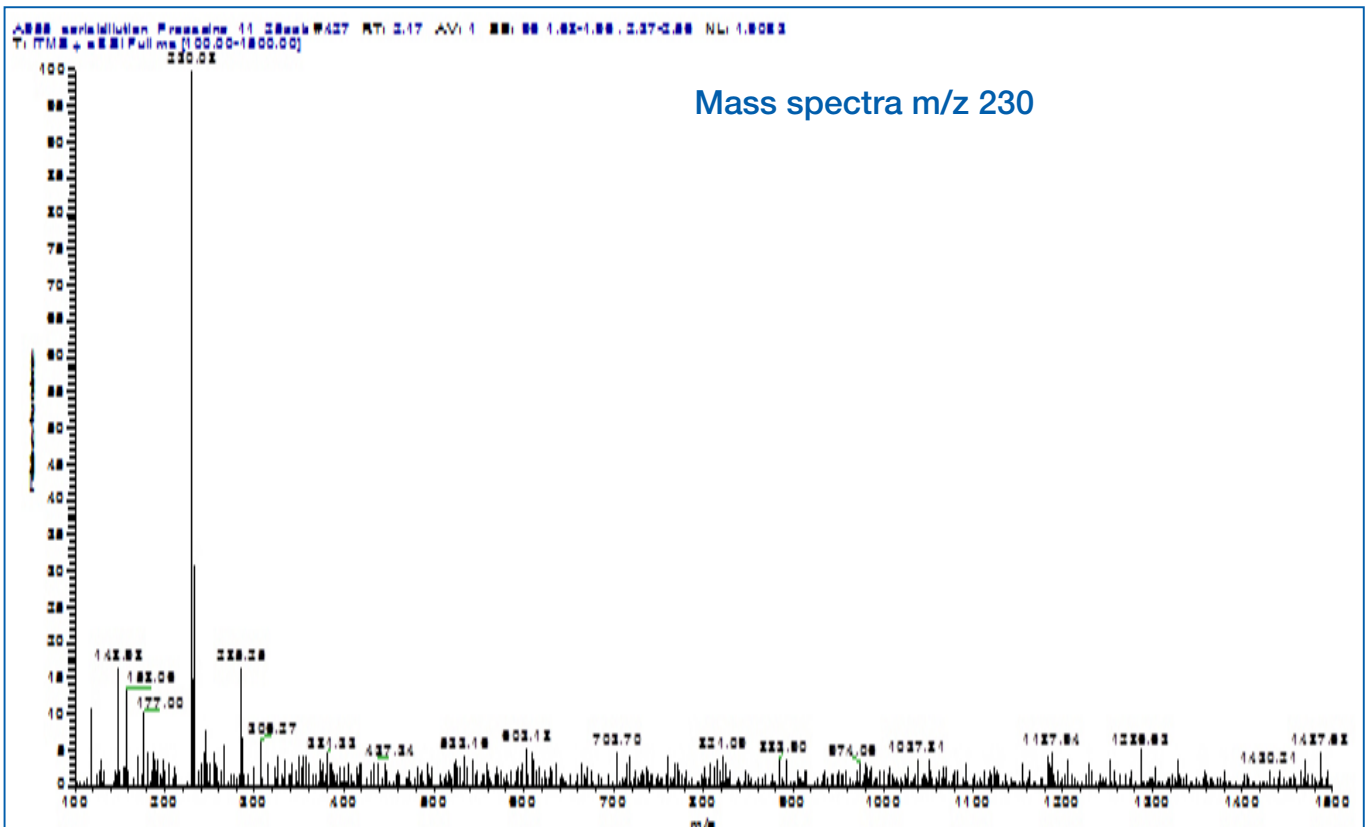
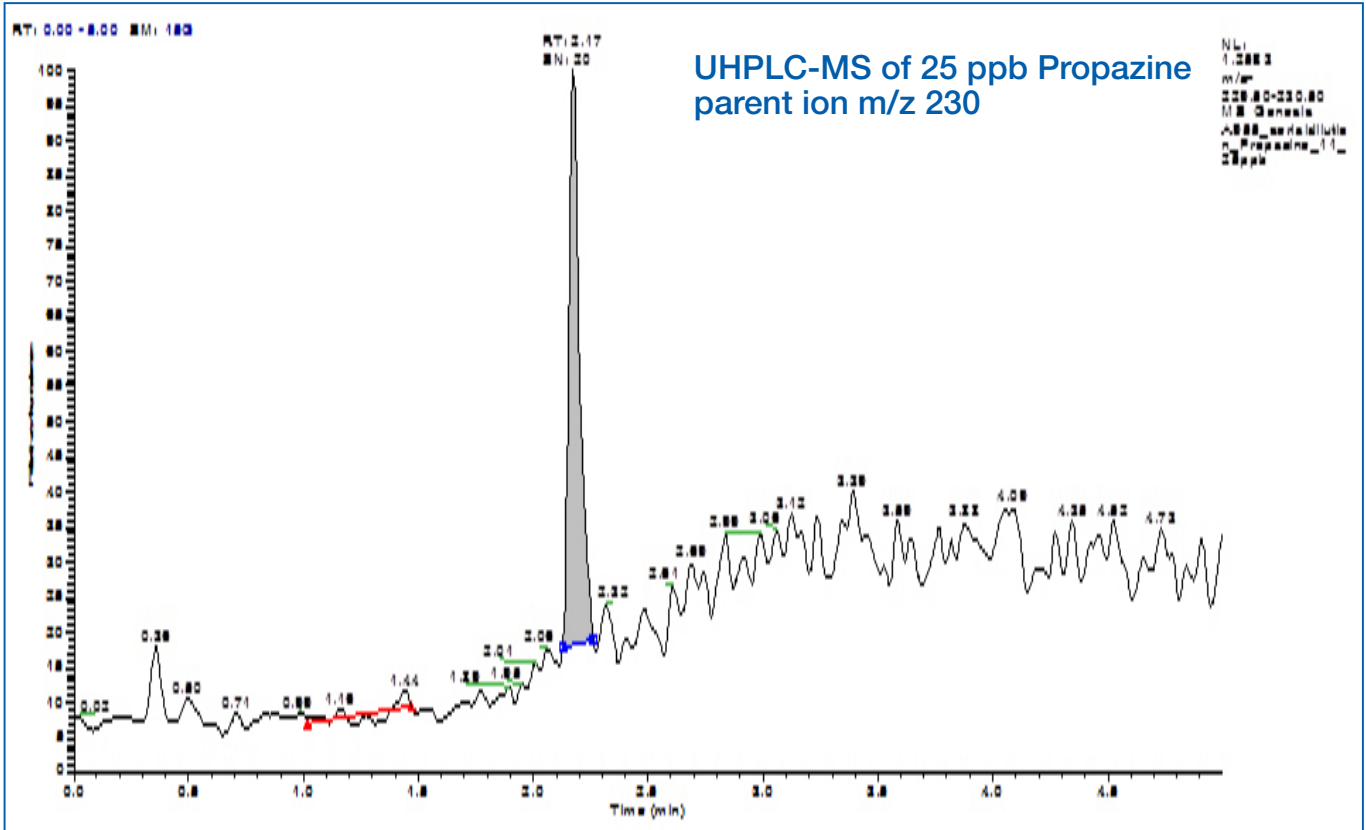
Peak height with PDA (200–400 nm) is < 2 mAU.



# UHPLC-MS/MS of 250 ppt Propazine

## UHPLC-MS/MS Specification:

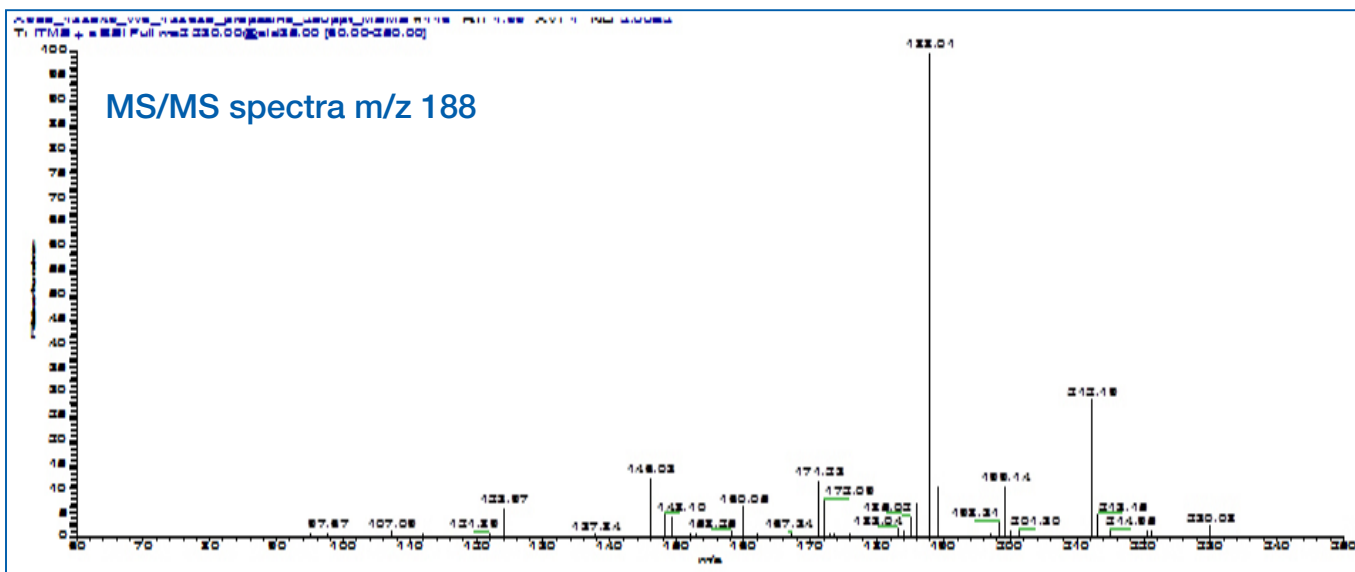
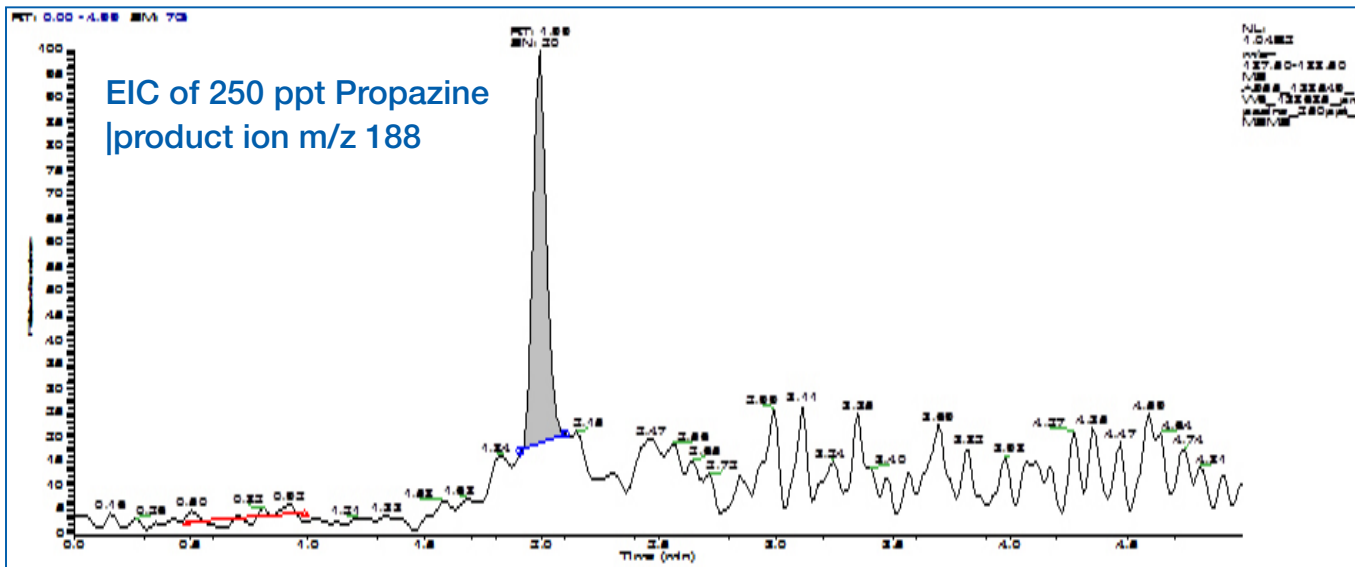
Signal-to-noise ratio of Propazine product ion peak  $m/z$  188 is  $> 10$ .



# UHPLC-MS Gradient Suitability Test

## UHPLC-MS Specification:

In positive mode ionization, any eluted peak height is < 25 ppb Propazine parent ion m/z 230 in full scale TIC and EIC.



To place an order, contact your local distributor.



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