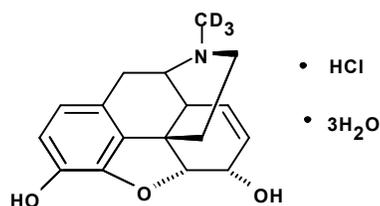


## Product Information

**Morphine-*d*<sub>3</sub> hydrochloride solution**  
**100 µg/mL±5% in methanol**  
**drug standard**

Catalog Number **M6380**  
Lot Number 109K8732  
Storage Temperature -20 °C

CAS RN 118357-24-7  
Synonyms: 7,8-Didehydro-4,5-epoxy-17-(methyl-*d*<sub>3</sub>)-  
morphinan-3,6-diol hydrochloride



### Product Description

Molecular Formula: C<sub>17</sub>D<sub>3</sub>H<sub>16</sub>NO<sub>3</sub> · HCl · 3H<sub>2</sub>O  
Molecular Weight: 378.86

DEA Class: Exempt preparation of Class II

Concentration: 111 µg of morphine-*d*<sub>3</sub> hydrochloride  
(equivalent to 99 µg of free base)/mL of GC grade  
methanol, concentration verified by UV.

Expiration Date: January 2013

### Precautions and Disclaimer

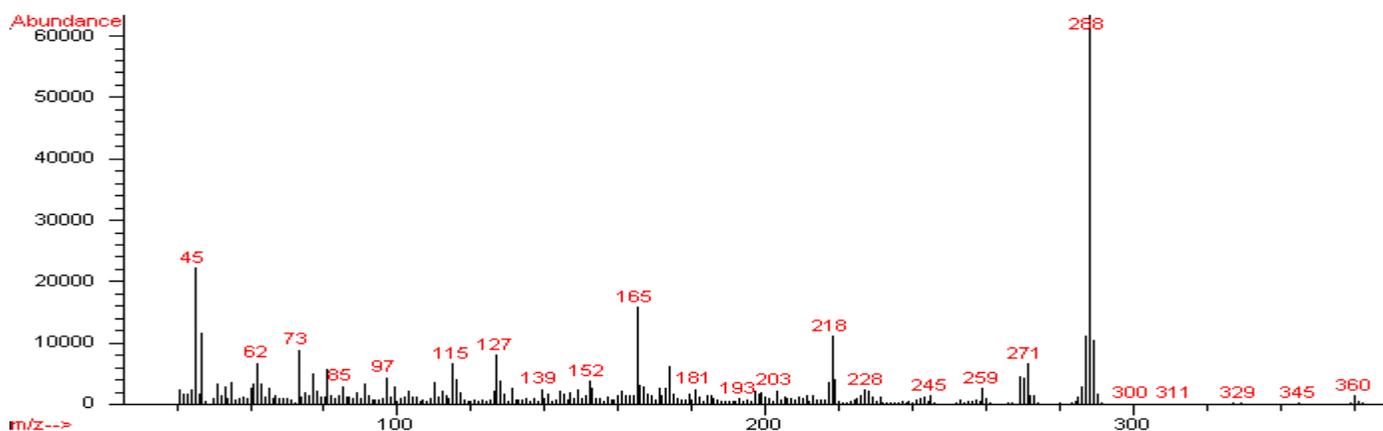
This product is for R&D use only, not for drug,  
household, or other uses. Please consult the Material  
Safety Data Sheet for information regarding hazards  
and safe handling practices.

### Storage/Stability

Store the product at -20 °C. If stored at -20 °C in an  
airtight container, protected from light, decomposition of  
the product is less than 1% in 24 months. After  
opening, concentration may change due to loss of  
solvent.

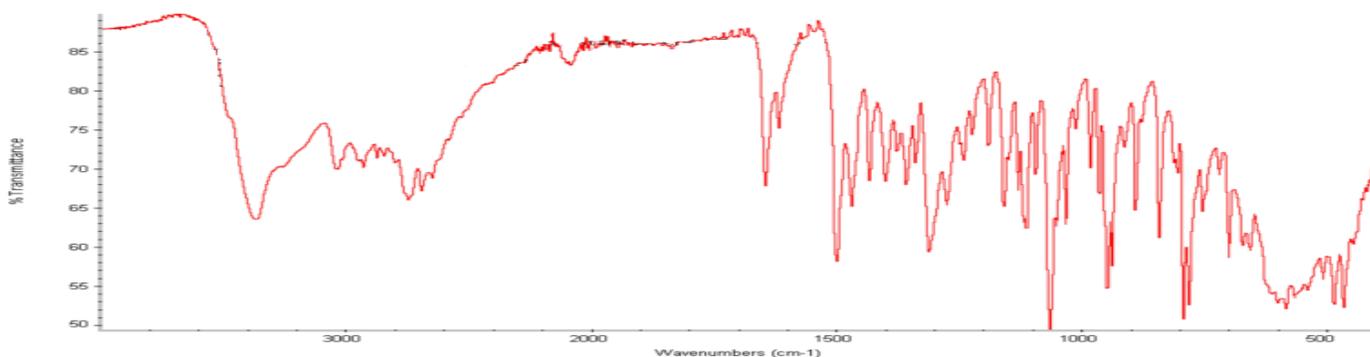
CMW,MAM 05/10-1

### 70 eV Electron Ionization Mass Spectrum



Hewlett-Packard 5890 Series II Gas Chromatograph  
Hewlett-Packard 5971 Mass Selective Detector  
Hewlett-Packard G1034C MS ChemStation (HP-DOS series)

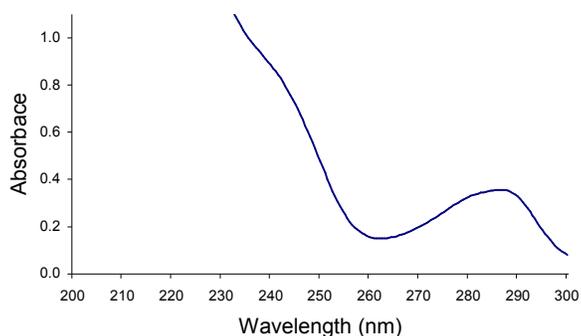
### FT-IR



Nicolet 380 FT-IR Smart Orbit(ATR)

### Ultraviolet Spectrum

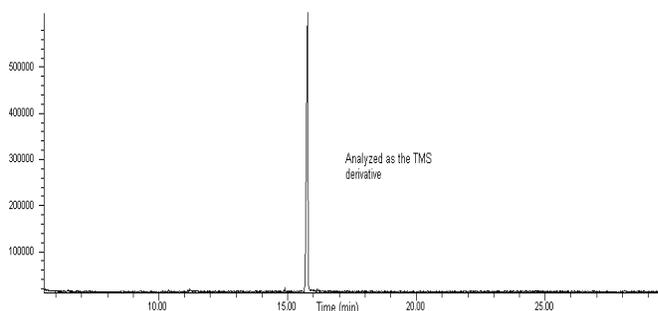
<b>Peak</b>	286.0 nm
<b>Absorbance</b>	0.3559
<b>Solvent</b>	Methanol
<b>Dilution</b>	neat



Beckman-Coulter DU 800

### Capillary Gas Chromatography

**Column** Supelco SPB-1 (Catalog Number 24162)  
**I.D.** 0.20 mm **Length** 15 m **Film Thickness** 0.20  $\mu\text{m}$   
**Oven Temperature** 50  $^{\circ}\text{C}$  (2 minutes), then  
15  $^{\circ}\text{C}/\text{minute}$  to 300  $^{\circ}\text{C}$ , hold 11 minutes  
**Injector Temperature** 250  $^{\circ}\text{C}$ , Split  
**Detector** Hewlett-Packard 5971  
Mass Selective Detector (70 eV, 40-500 m/z)



Hewlett-Packard 5890

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