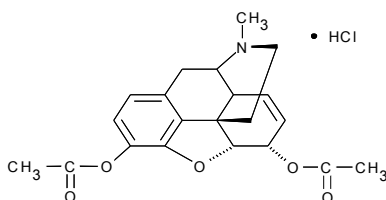


## Product Information

**Heroin hydrochloride solution**  
**100 µg/mL±5% in methanol**  
**drug standard**

Catalog Number **H5144**  
Lot Number 050M8705  
Storage Temperature -20 °C

CAS RN 1502-95-0  
Synonyms: Diacetylmorphine Hydrochloride,  
Acetomorphine Hydrochloride, Diamorphine  
Hydrochloride



### Product Description

Molecular Formula: C<sub>21</sub>H<sub>23</sub>NO<sub>5</sub> · HCl  
Molecular Weight: 405.87

DEA Class: Exempt preparation of Class I

Concentration: 0.114 mg of heroin hydrochloride  
(equivalent to 0.104 mg of free base)/mL of GC grade  
methanol (concentration verified by UV)

Expiration Date: August 2013

### Precautions and Disclaimer

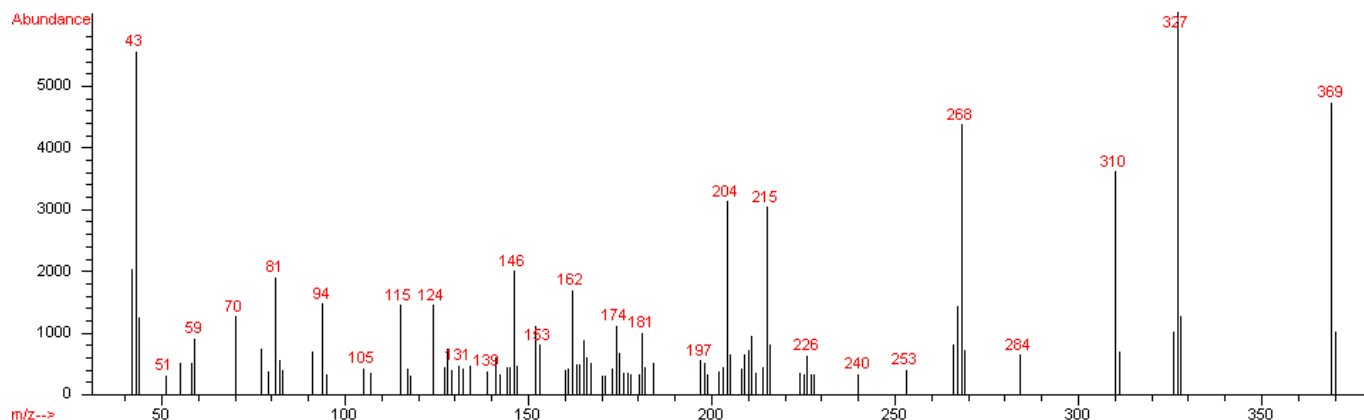
This product is for R&D use only, not for drug,  
household, or other uses. Please consult the Material  
Safety Data Sheet for information regarding hazards  
and safe handling practices.

### 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 12 months. After  
opening, concentration may change due to loss of  
solvent.

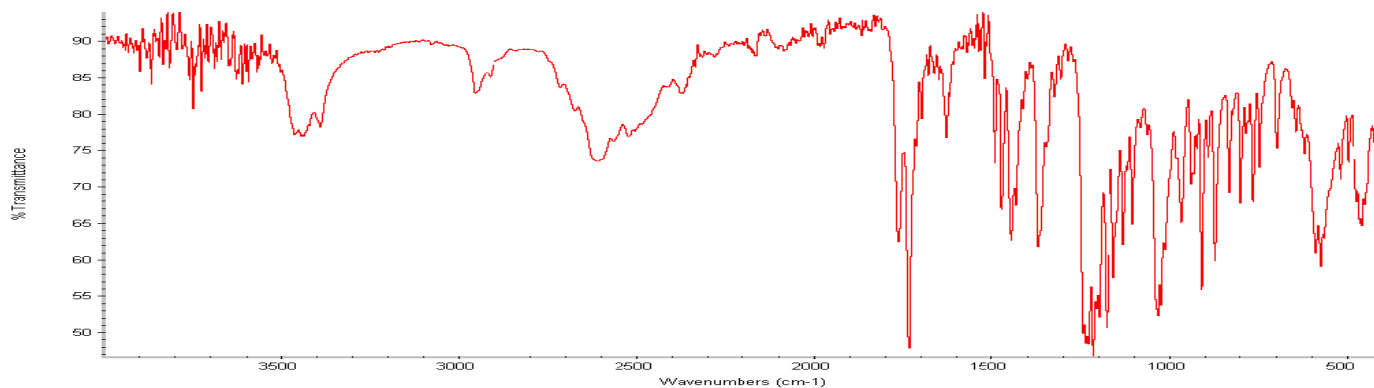
CMW,MAM 08/10-1

### 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)

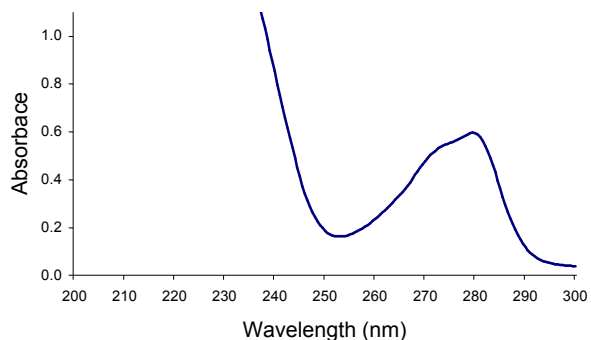
### FT-IR



Nicolet 380 FT-IR Smart Orbit(ATR)

### Ultraviolet Spectrum

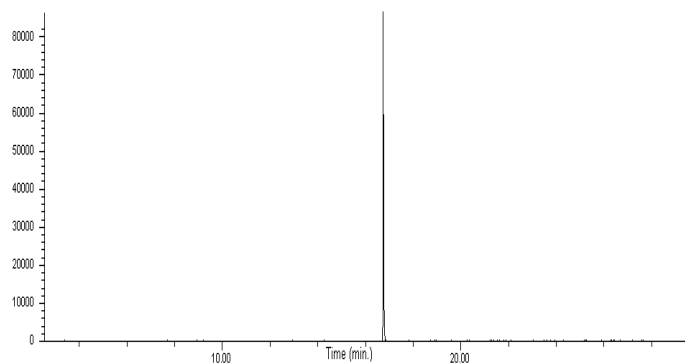
**Peak** 279.5 nm  
**Absorbance** 0.5966  
**Dilution** Neat



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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