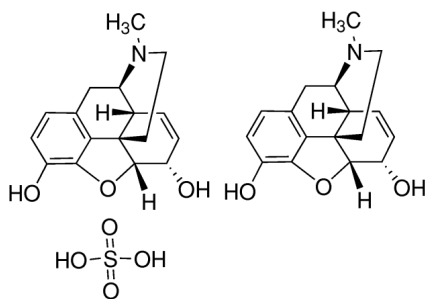


Product Information

Morphine sulfate salt solution
1.0 mg/mL \pm 5% in methanol
drug standard

Catalog Number **M9524**
Lot Number 071M8723V
Storage Temperature -20°C

CAS RN 64-31-3
Synonym: (5 α , 6 α)-7,8-Didehydro-4,5-epoxy-
17-methylmorphinan-3,6-diol sulfate



Product Description

Molecular Formula: $\text{C}_{34}\text{H}_{38}\text{N}_2\text{O}_6 \cdot \text{H}_2\text{SO}_4$
Molecular Weight: 668.75

DEA Class: Exempt preparation of Class II

Concentration: 1.14 mg morphine sulfate (equivalent to
0.97 mg of free base)/mL of GC grade methanol
(concentration verified by UV)

Expiration Date: August 2014

Precautions and Disclaimer

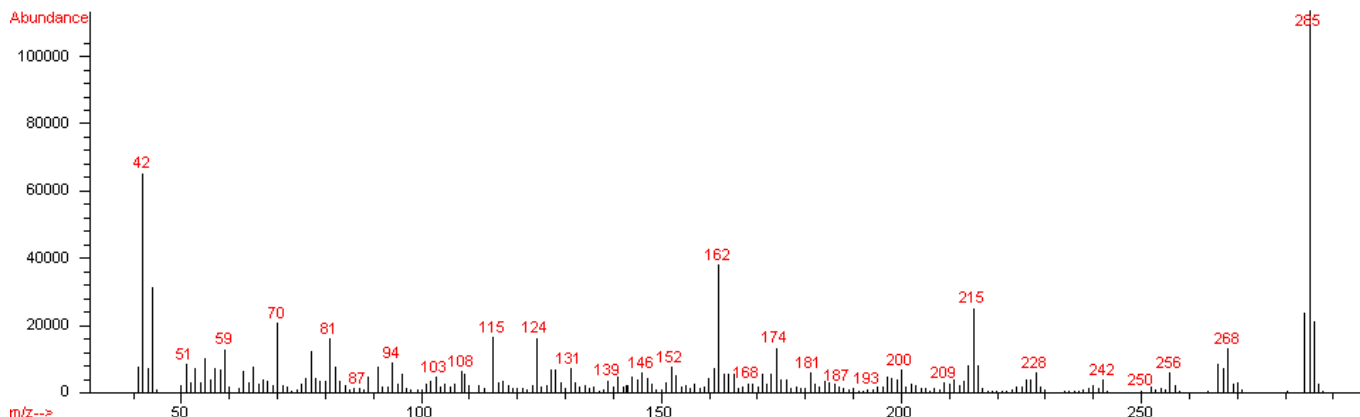
This product is for R&D use only, not for drug,
household, or other uses. Please consult the Material
Safety Data Sheet for information regarding hazards
and safe handling practices.

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 04/14-1

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)

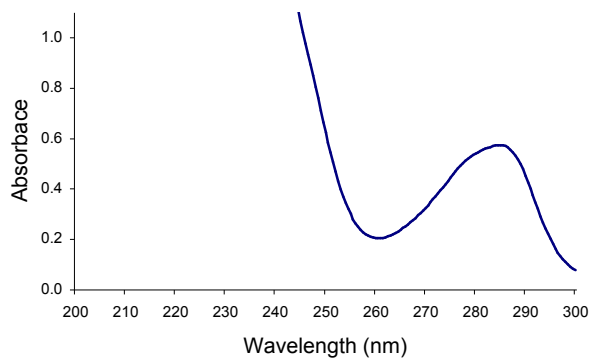
FT-IR



Nicolet 380 FT-IR Smart Orbit(ATR)

Ultraviolet Spectrum

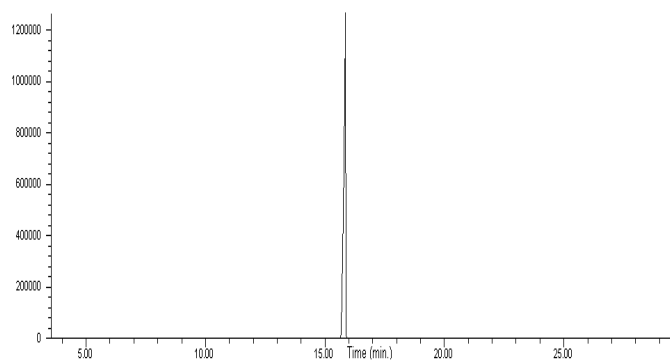
Peak	285.0 nm
Absorbance	0.5739
Solvent	0.2 N H ₂ SO ₄
Dilution	1:9 (v/v)



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 µm
Oven Temperature 50 °C (2 minutes), then
15 °C/minute to 300 °C, hold 11 minutes
Injector Temperature 250 °C, Splitless
Detector Hewlett-Packard 5971
Mass Selective Detector (70 eV, 40-500 m/z)



Hewlett-Packard 5890