3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

# **Product Information**

 $\Delta^9$ –Tetrahydrocannabinol solution 1.0 mg/mL $\pm$ 5% in methanol analytical standard, for drug analysis

Catalog Number **T4764**Lot Number SLBQ8309V
Storage Temperature 2–8 °C

CAS RN 1972-08-3

Synonyms: Δ¹-Tetrahydrocannabinol

#### **Product Description**

Molecular Formula: C<sub>21</sub>H<sub>30</sub>O<sub>2</sub> Molecular Weight: 314.46

DEA Class: Exempt preparation of Class I

Concentration: 0.95 mg of  $\Delta^9$ -tetrahydrocannabinol/mL of GC grade methanol, concentration verified by HPLC.

Expiration Date: July 2019

#### **Precautions and Disclaimer**

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

### Storage/Stability

Store the product at 2–8 °C. If stored at 2–8 °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 07/16-1

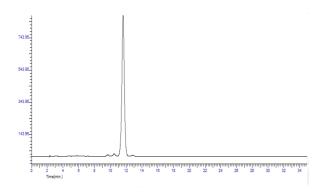
# **High Pressure Liquid Chromatography**

**Column**: Supelco Discovery C18, 5  $\mu$ m, 2.1  $\times$  250 mm **Mobile Phase**: 80% Methanol/20% Water (18 M $\Omega$  $\times$ cm)

Gradient: Isocratic Flow Rate: 0.3 mL/min

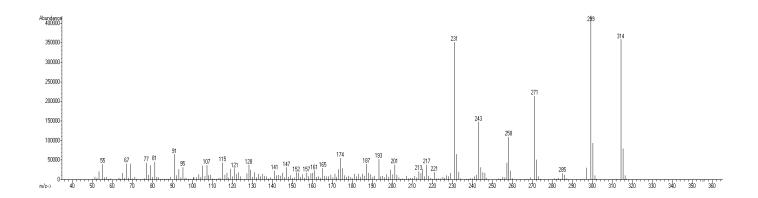
Temp: ambient

Detector: UV @ 210 nm



Perkin-Elmer Series 200 with Totalchrom w/s ver. 6.3.0.0445

### 70 eV Electron Ionization Mass Spectrum



## **Ultraviolet Spectrum**

Peak	282.5 nm
ı can	202.0 11111

Absorbance 0.536

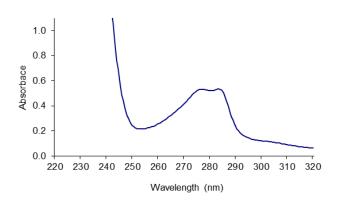
Solvent Methanol

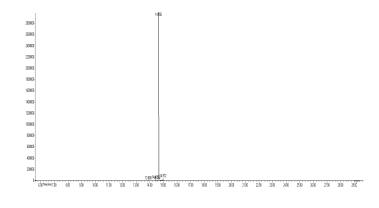
**Dilution** 1:9 (v/v)

# **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, Split
Detector Hewlett-Packard 5971

Mass Selective Detector (70 eV, 40-500 m/z)





Hewlett-Packard 6890

Shimadzu UV-1800