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 SLBJ6701V
Storage Temperature 2–8 °C

CAS RN 1972-08-3

Synonyms:  $\Delta^1$ -Tetrahydrocannabinol, Tetrahydro-6,6,9-trimethyl-3-pentyl-6H-dibenzo[b,d]pyran-1-ol,  $\Delta^9$ -THC;  $\Delta^1$ -THC

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

Expiration Date: April 2017

#### **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 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.

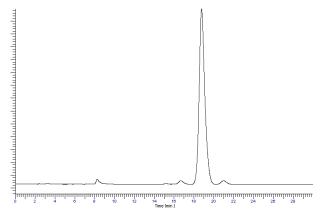
CMW,MAM 04/14-1

## **High Pressure Liquid Chromatography**

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

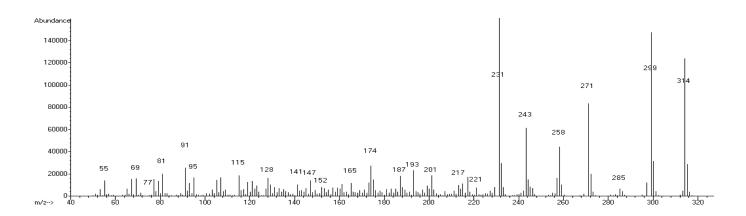
Gradient: Isocratic Flow Rate: 0.4 mL/min Temp: ambient

**Detector**: UV at 210 nm



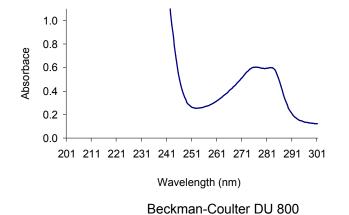
Perkin-Elmer Series 200 with Totalchrom w/s ver. 6.3.0.0445

## 70 eV Electron Ionization Mass Spectrum



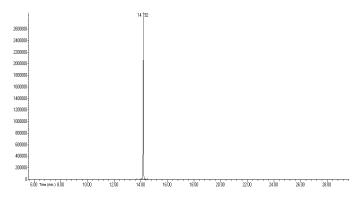
### **Ultraviolet Spectrum**

Peak	282 nm
Absorbance	0.6009
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