

## 1. GENERAL INFORMATION

**IUPAC Name:** *rel*-2-[(1R,3S)-3-hydroxycyclohexyl]-5-(2-methylnonan-2-yl)phenol

**CFR:** Schedule I

**CAS#:** 70434-92-3

**Synonyms:** (±)-CP 47,497-C8-homolog, (C8)-CP 47,497, Cannabicyclohexanol, 5-(1,1-dimethyloctyl)-2-[(1R,3S)-3-hydroxycyclohexyl]-phenol

**Source:** DEA Reference Material Collection

**Appearance:** White powder

**Kovat's Index:** Pending

**$UV_{max}$  (nm):** 274.5

## 2. CHEMICAL AND PHYSICAL DATA

### 2.1 CHEMICAL DATA

Form	Chemical Formula	Molecular Weight	Melting Point (°C)
CP 47,497-C8-homolog	C <sub>22</sub> H <sub>36</sub> O <sub>2</sub>	332	89.4

## 3. ADDITIONAL RESOURCES

[Forendex](#)

[Wikipedia](#)

Uchiyama, N.; Kikura-Hanajiri, R.; Ogata, J.; Goda, Y. Chemical analysis of synthetic cannabinoids as designer drugs in herbal products. *For. Sci. Int.* **2010**, *198*, 31-38.



## 4.2 Gas Chromatography/Mass Spectrometry

*Sample Preparation:* Dilute analyte ~ 1 mg/mL in methanol

***Instrument:*** Agilent gas chromatograph operated in split mode with MS detector

***Column:*** DB-1 MS (or equivalent); 30m x 0.25 mm x 0.25  $\mu$ m

***Carrier Gas:*** Helium at 1 mL/min

***Temperatures:*** Injector: 280°C

MSD transfer line: 280°C

MS Source: 230°C

MS Quad: 150°C

Oven program:

1) 100°C initial temperature for 1.0 min

2) Ramp to 300°C at 12 °C/min

3) Hold final temperature for 9.0 min

***Injection Parameters:*** Split Ratio = 20:1, 1  $\mu$ L injected

***MS Parameters:*** Mass scan range: 30-550 amu

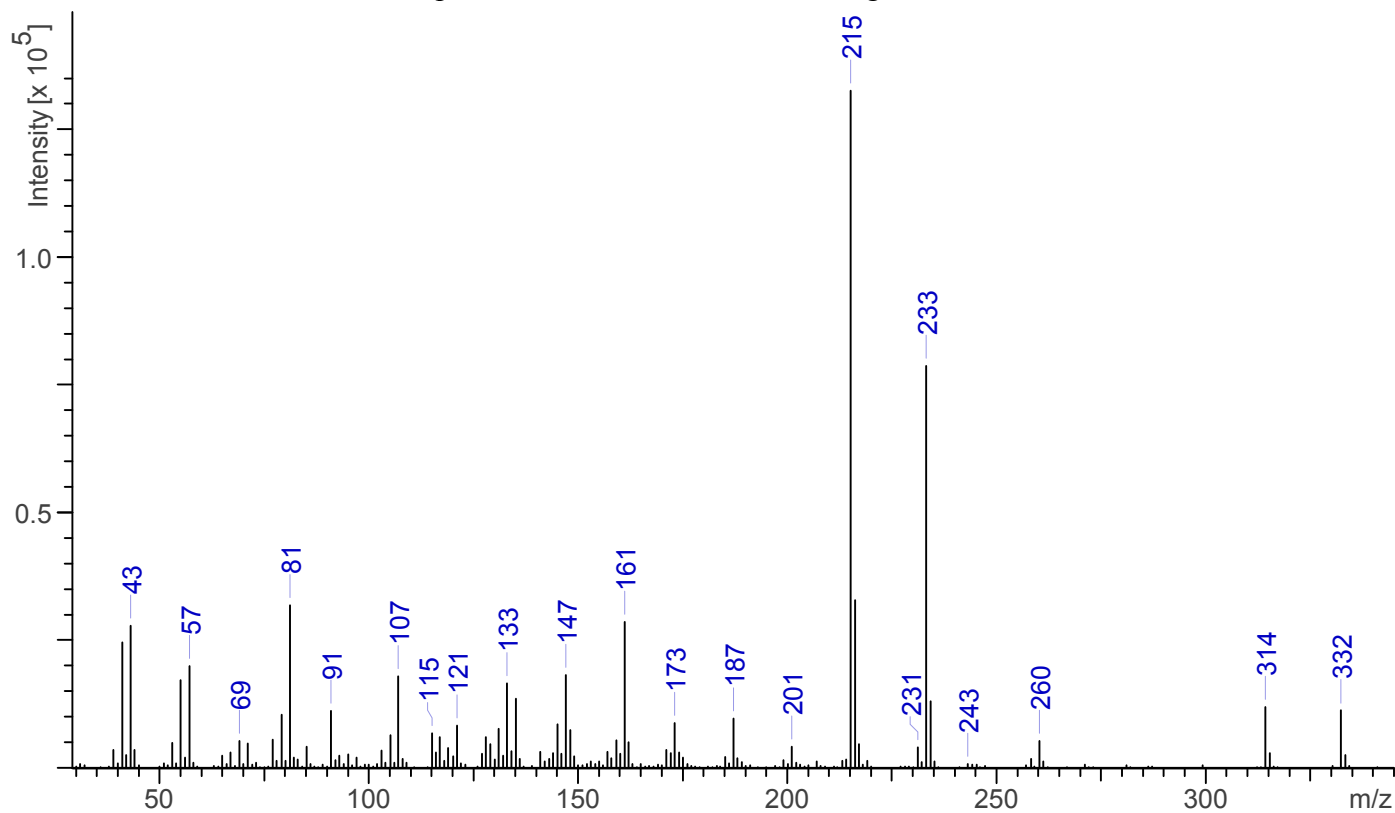
Threshold: 100

Tune file: stune.u

Acquisition mode: scan

***Retention Time:*** 16.864 min

EI Mass Spectrum: CP 47, 497-C8-homolog; Lot 0425163-4



### 4.3 INFRARED SPECTROSCOPY (FTIR)

**Instrument:** FTIR with diamond ATR attachment (3 bounce)

**Scan Parameters:** Number of scans: 32  
Number of background scans: 32  
Resolution: 4 cm<sup>-1</sup>  
Sample gain: 8  
Aperture: 150

FTIR ATR (Diamond, 3 Bounce): CP 47,497-C8-homolog; Lot 0425163-4

