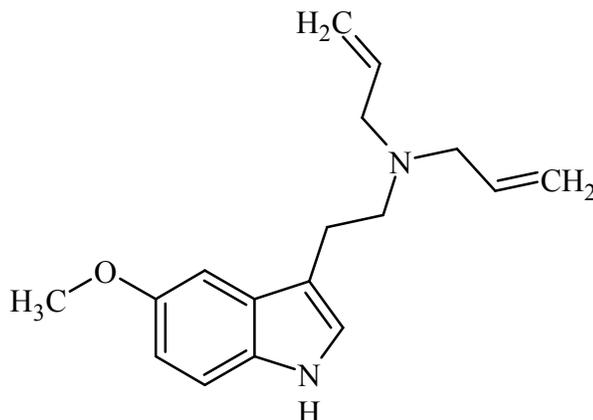




## 5-Methoxy-DALT

The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.



### 1. GENERAL INFORMATION

**IUPAC Name:** *N*-[2-(5-methoxy-1*H*-indol-3-yl)ethyl]-*N*-(prop-2-en-1-yl)prop-2-en-1-amine

**CAS#:** 928822-98-4 (Base)

**Synonyms:** 5-MeO-DALT, 5-Methoxy-*N,N*-Diallyltryptamine, *N,N*-Diallyl-5-methoxytryptamine

**Source:** DEA Reference Material Collection

**Appearance:** White powder (Base and HCl)

**UV<sub>max</sub>(nm):** 220 (Base)

### 2. CHEMICAL AND PHYSICAL DATA

#### 2.1 CHEMICAL DATA

Form	Chemical Formula	Molecular Weight	Melting Point (°C)
Base	C <sub>17</sub> H <sub>22</sub> N <sub>2</sub> O	270	105.1
HCl	C <sub>17</sub> H <sub>22</sub> N <sub>2</sub> O · HCl	306	160.3



## 5-Methoxy-DALT

The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.



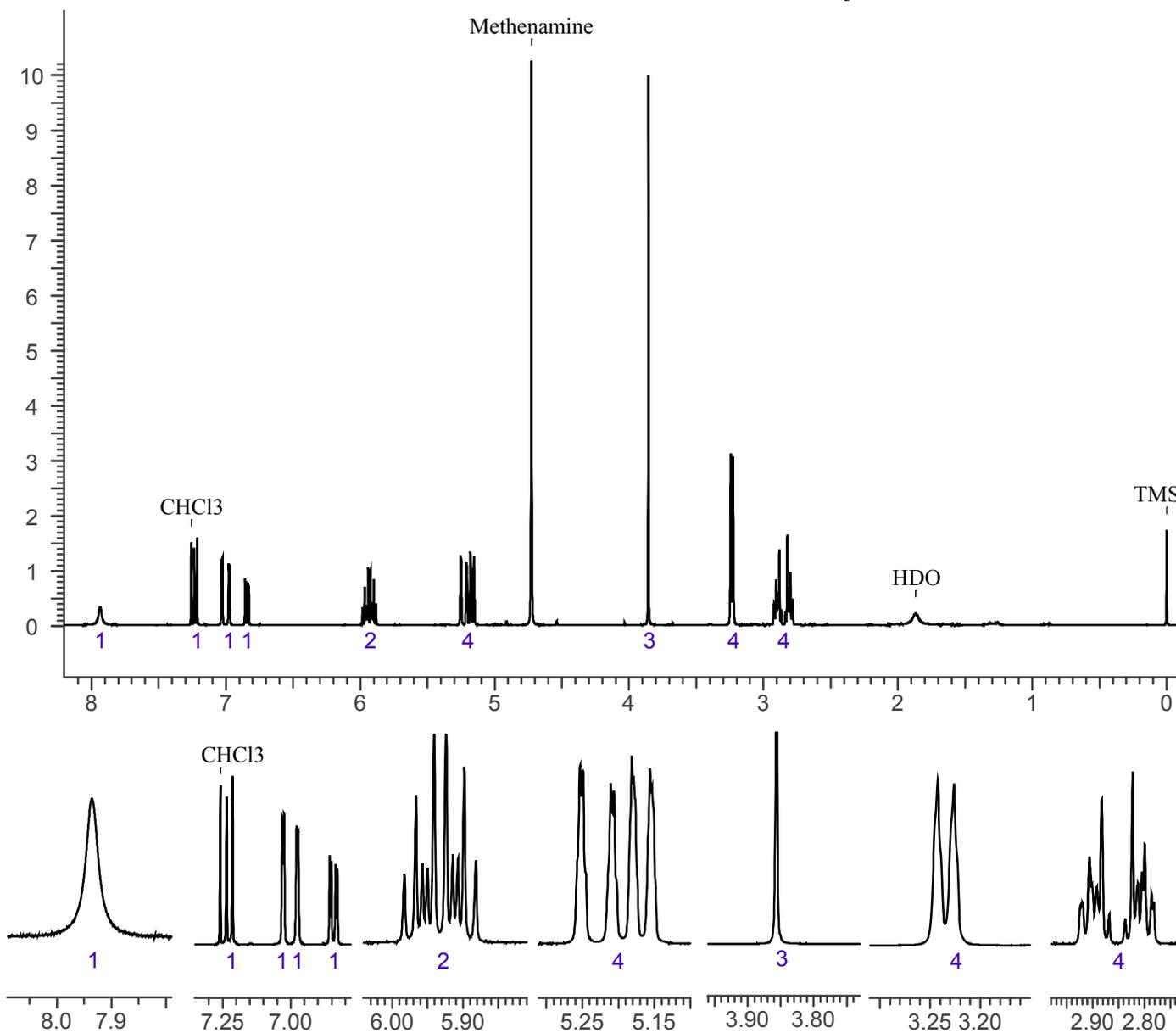
### 3. QUALITATIVE DATA

#### 3.1 NUCLEAR MAGNETIC RESONANCE

**Sample Preparation:** (Base) - Dilute analyte to ~10 mg/mL in CDCl<sub>3</sub> containing TMS for 0 ppm reference and methenamine as quantitative internal standard.

**Instrument:** 400 MHz NMR spectrometer  
**Parameters:** Spectral width: at least containing -3 ppm through 13 ppm  
Pulse angle: 90°  
Delay between pulses: 45 seconds

<sup>1</sup>HNMR, 5-Methoxy-DALT Base, Lot K8H81105, CDCl<sub>3</sub>, 400MHz





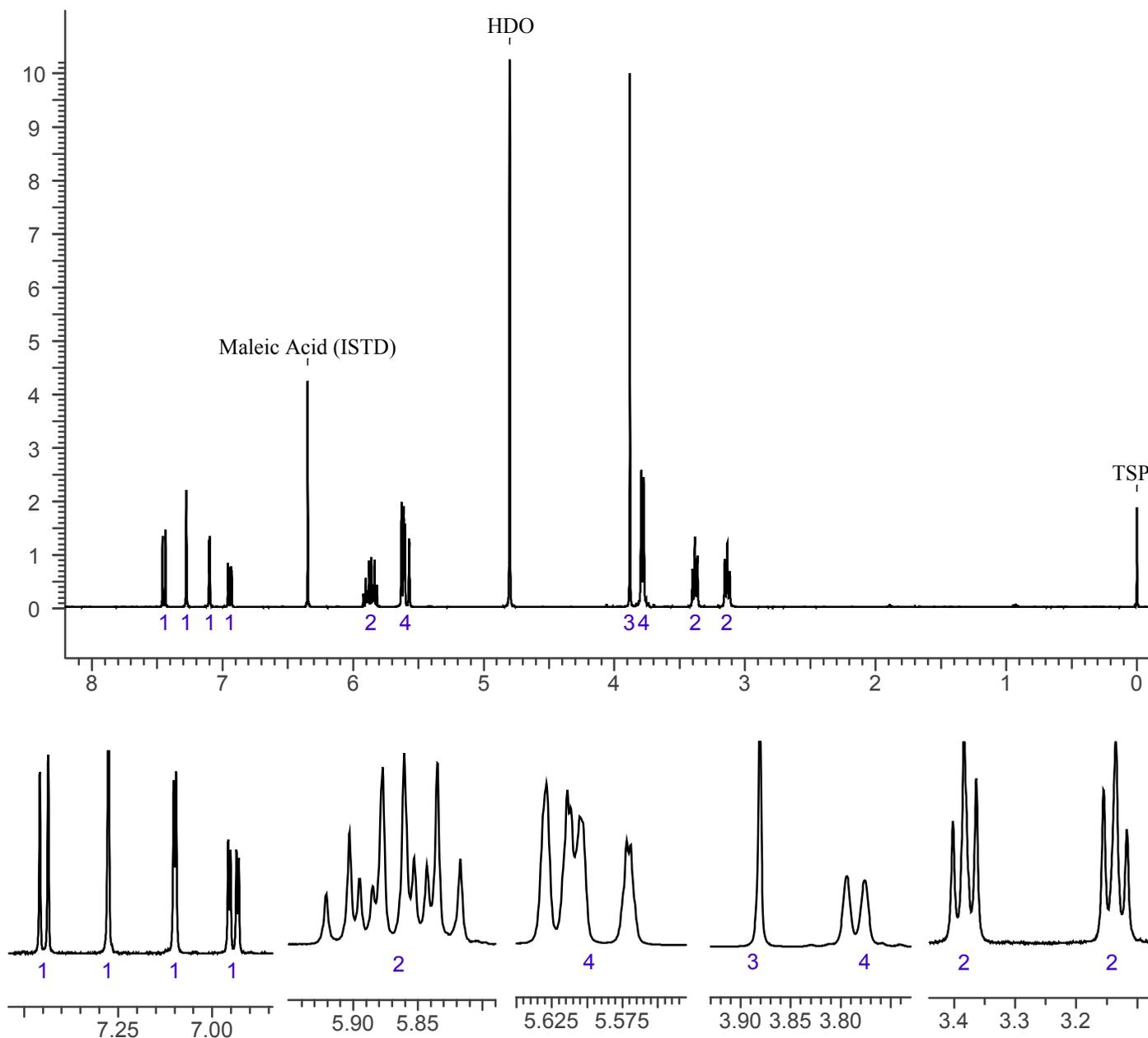
## 5-Methoxy-DALT

The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.



*Sample Preparation:* (HCl) Dilute analyte to ~30 mg/mL in D<sub>2</sub>O containing TSP for 0 ppm reference and maleic acid as quantitative internal standard.

<sup>1</sup>HNMR, 5-Methoxy-DALT HCl, Lot RM-131001-04, D<sub>2</sub>O, 400MHz





## 5-Methoxy-DALT

The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.



### 3.2 GAS CHROMATOGRAPHY/MASS SPECTROMETRY

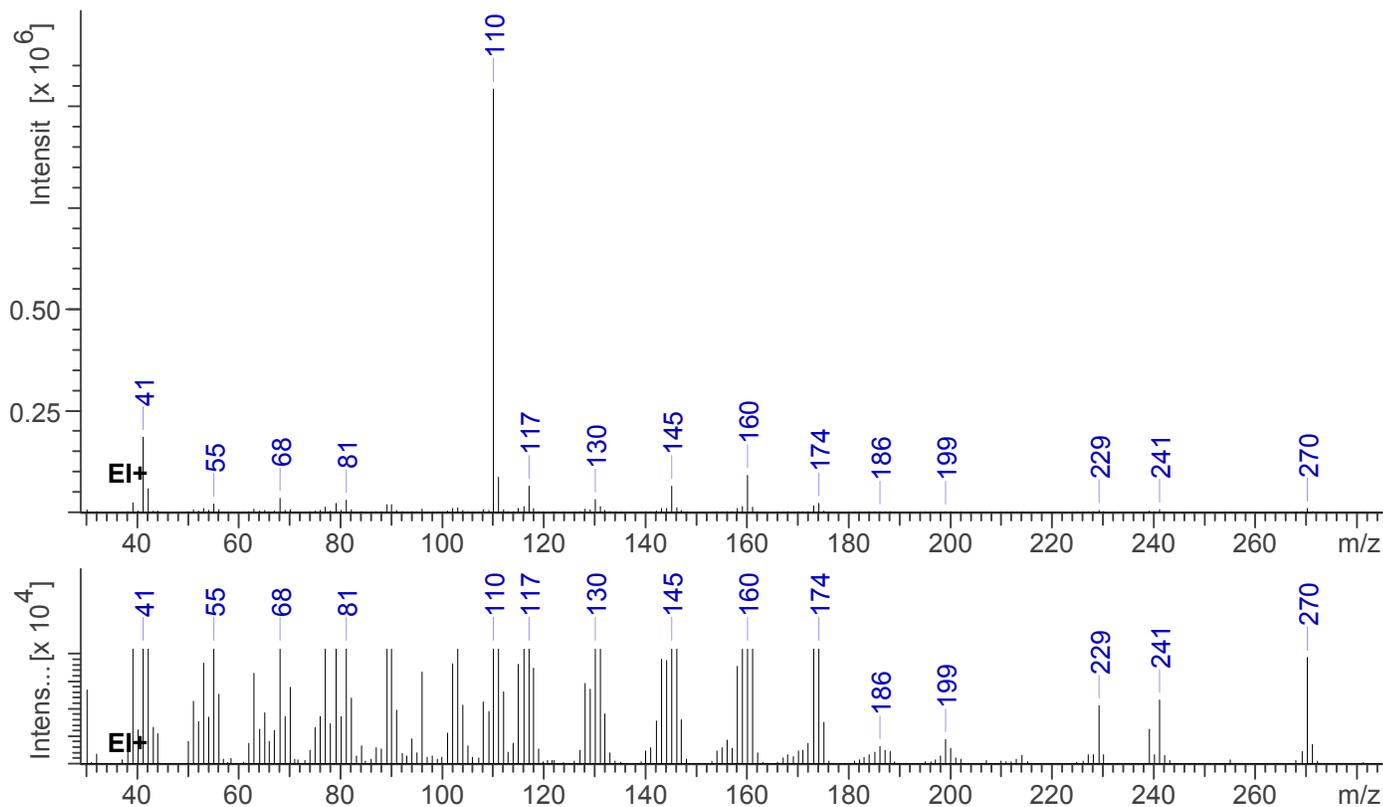
*Sample Preparation:* Dilute analyte ~4 mg/mL into chloroform (Base).

**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:** 14.548 min

EI Mass Spectrum, 5-Methoxy-DALT Base, Lot K8H81105





# 5-Methoxy-DALT

The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.

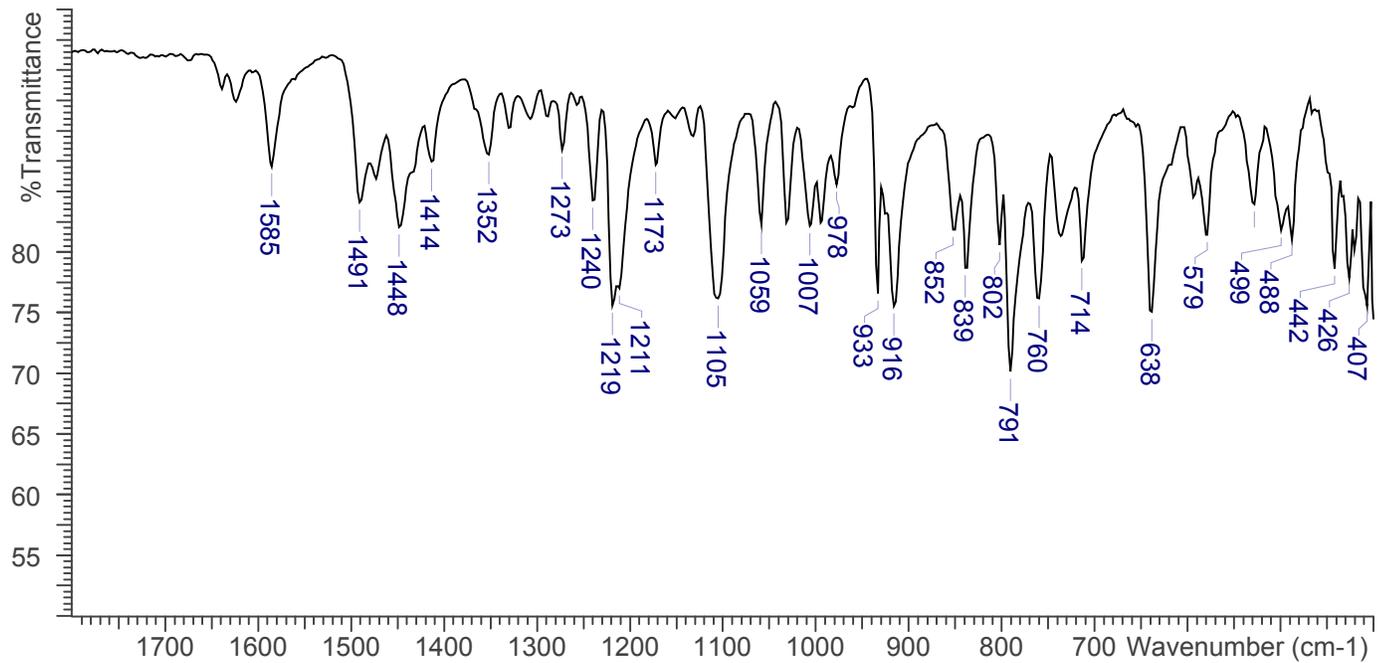
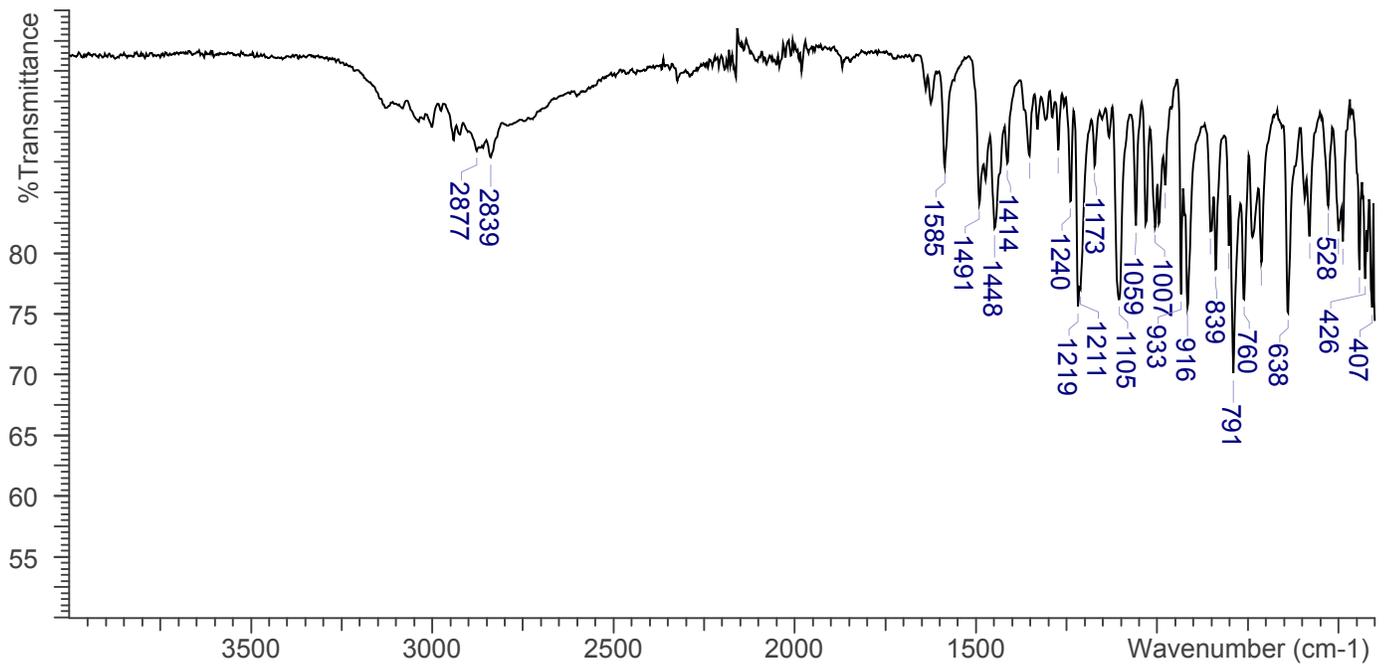


## 3.3 INFRARED SPECTROSCOPY (FTIR)

**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), 5-Methoxy-DALT Base (Lot K8H81105)



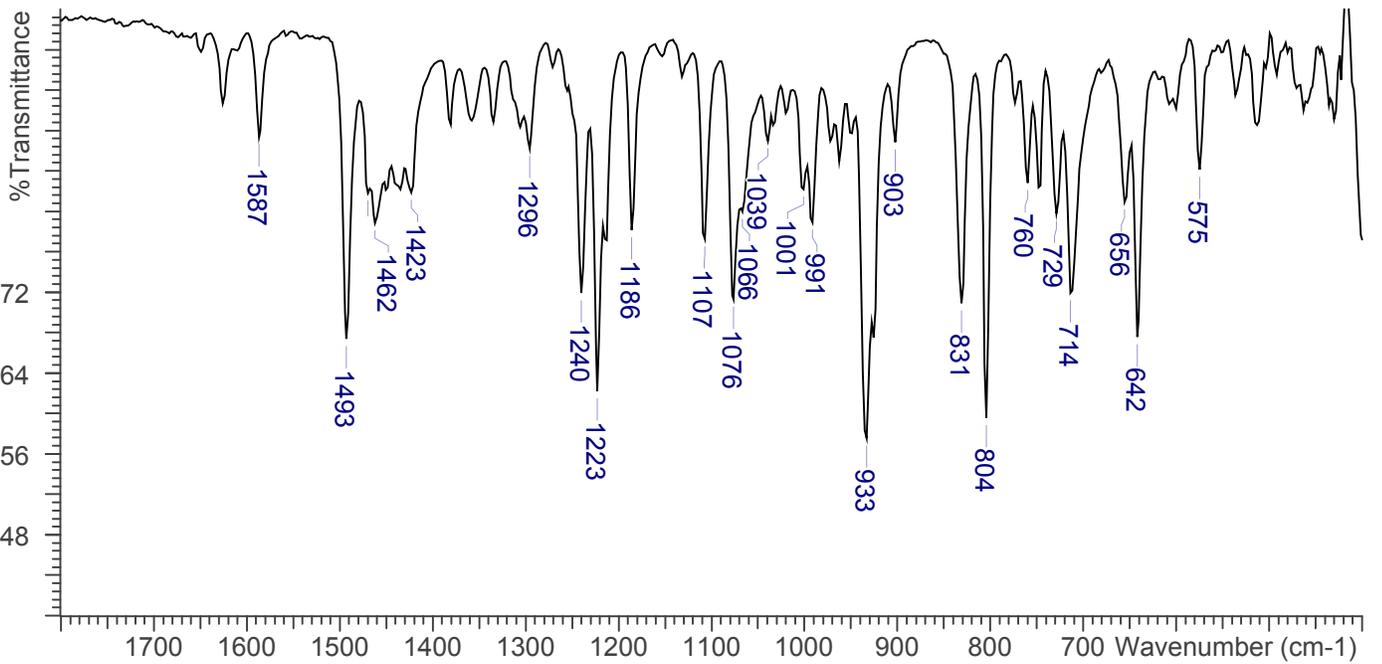
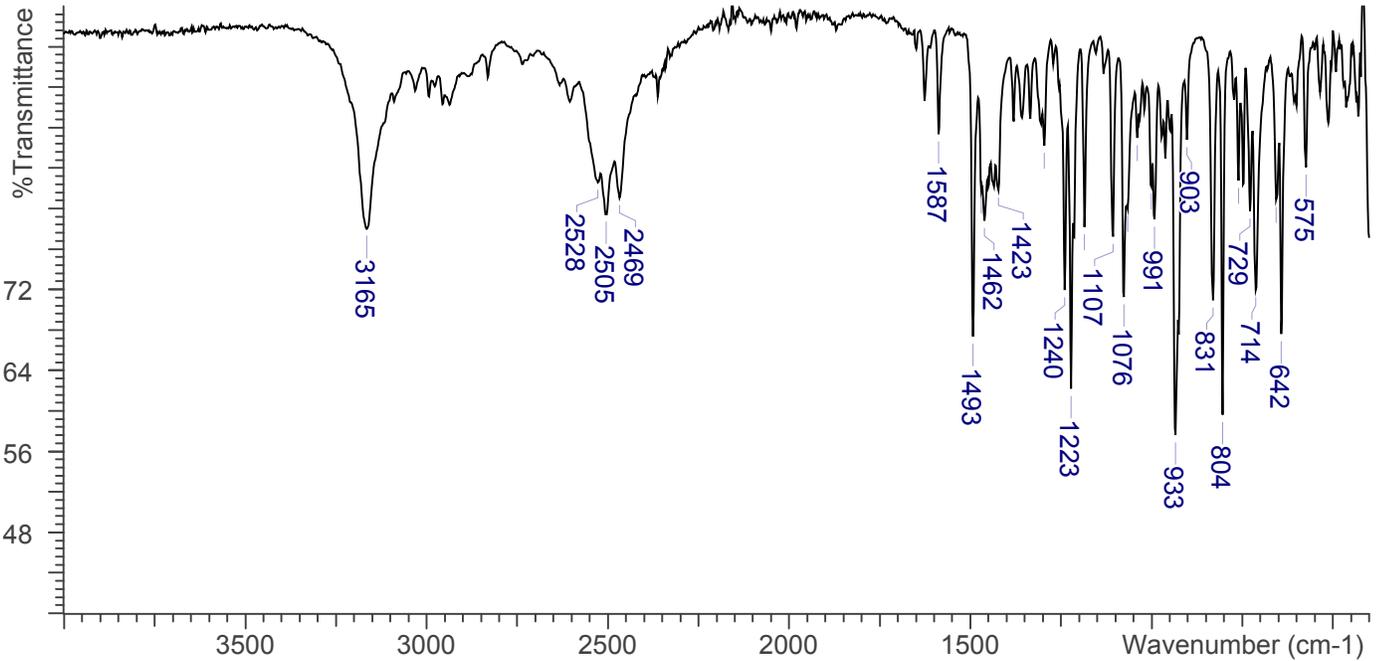


# 5-Methoxy-DALT

The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.



FTIR, ATR (Diamond, 3 Bounce), 5-Methoxy-DALT HCl, Lot RM-131001-04





## 5-Methoxy-DALT

*The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.*



### 4. ADDITIONAL RESOURCES

[Wikipedia](#)

[Forendex](#)