

### 1. GENERAL INFORMATION

<b>IUPAC Name:</b>	1-(2-fluorophenyl)- <i>N</i> -methylpropan-2-amine
<b>CFR:</b>	Not Scheduled (6/2013)
<b>CAS#:</b>	1017176-48-5 (base)
<b>Synonyms:</b>	2-FMA, 2-fluoro- <i>N</i> - $\alpha$ -dimethylbenzeneethanamine
<b>Source:</b>	DEA Reference Material Collection
<b>Appearance:</b>	White powder (HCl)
<b>Kovat's Index:</b>	Pending
<b><math>UV_{max}</math> (nm):</b>	261.6

### 2. CHEMICAL AND PHYSICAL DATA

#### 2.1 CHEMICAL DATA

Form	Chemical Formula	Molecular Weight	Melting Point (°C)
Base	C <sub>10</sub> H <sub>14</sub> FN	167	Not Determined
HCl	C <sub>10</sub> H <sub>14</sub> FN · HCl	203	142.1

### 3. ADDITIONAL RESOURCES

[Wikipedia](#)

## 4. QUALITATIVE DATA

### 4.1 NUCLEAR MAGNETIC RESONANCE

#### Method NMR D<sub>2</sub>O

*Sample Preparation:* Dilute analyte to ~10 mg/mL in D<sub>2</sub>O containing TSP for 0 ppm reference and maleic acid as quantitative internal standard.

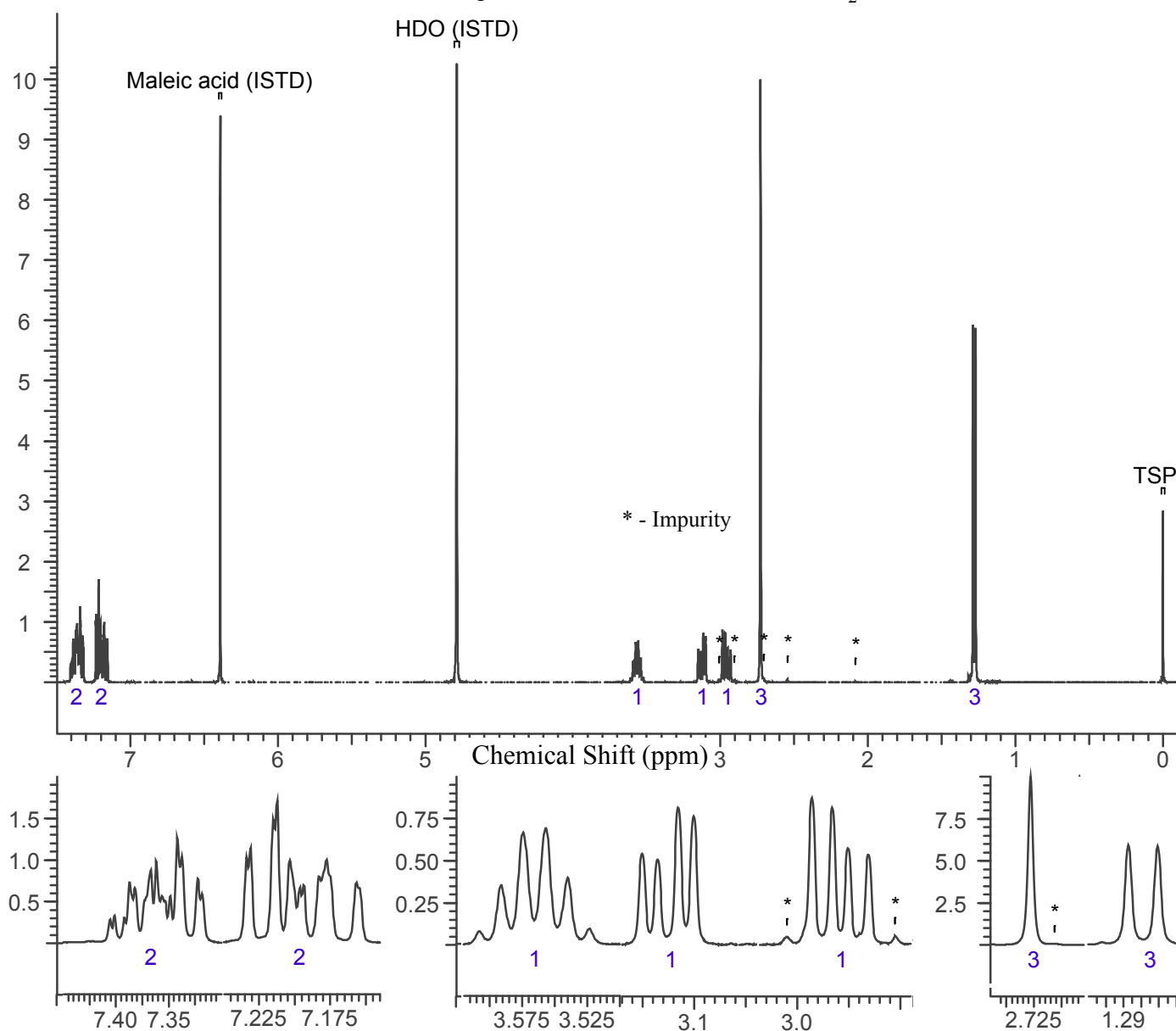
*Instrument:* 400 MHz NMR spectrometer

*Parameters:* Spectral width: at least containing -3 ppm through 13 ppm

Pulse angle: 90°

Delay between pulses: 45 seconds

<sup>1</sup>H NMR: 2-Fluoromethamphetamine HCl: Lot N17-P23D; D<sub>2</sub>O; 400 MHz



## 4.2 Gas Chromatography/Mass Spectrometry

*Sample Preparation:* Dilute analyte ~ 1 mg/mL base extracted into chloroform.

*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

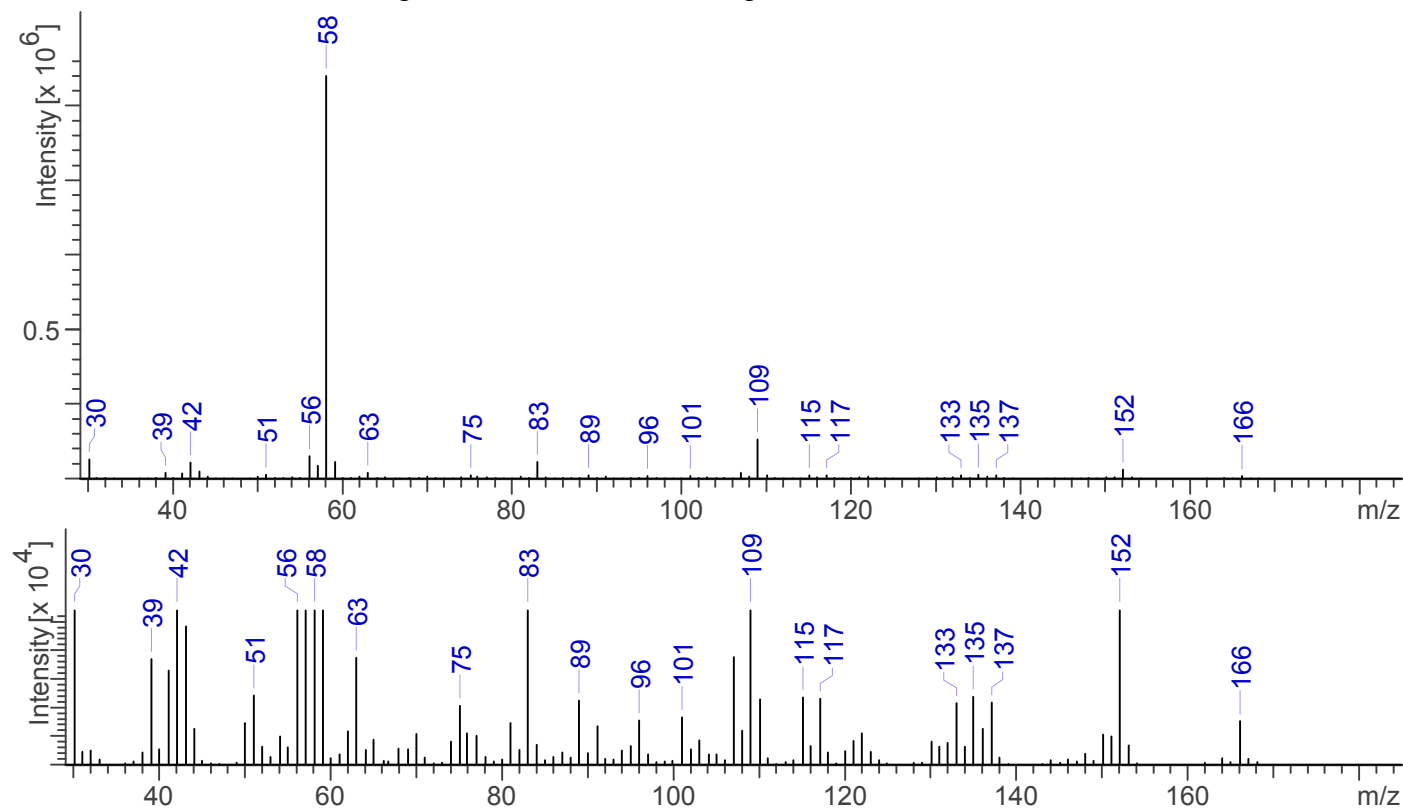
Threshold: 100

Tune file: stune.u

Acquisition mode: scan

*Retention Time:* 4.433 min

EI Mass Spectrum: 2-Fluoromethamphetamine HCl; Lot N17-P23D



### 4.3 INFRARED SPECTROSCOPY (FTIR)

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

**Scan Parameters:** Number of scans: 16  
Number of background scans: 16  
Resolution: 4 cm<sup>-1</sup>  
Sample gain: 8  
Aperture: 150

FTIR ATR (Diamond, 3 Bounce): 2-Fluoromethamphetamine HCl; Lot N17-P23D

