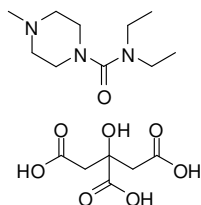




## Certificate of Analysis

**Axon Catalogue ID:** 3176 **Batch Number:** 1  
**Product Name:** Diethylcarbamazine citrate  
**Alternative Name(s):** Hetrazan; DEC  
**IUPAC Name:** N,N-Diethyl-4-methylpiperazine-1-carboxamide 2-hydroxypropane-1,2,3-tricarboxylate

**Structure:**



**Amount:**

**CAS number(s):** 90-89-1 (parent), 1642-54-2 (Citrate (1:1))  
**Molecular Formula:** C<sub>10</sub>H<sub>21</sub>N<sub>3</sub>O<sub>7</sub> **Molecular Weight:** 391.42  
**Batch Molecular Formula:** C<sub>10</sub>H<sub>21</sub>N<sub>3</sub>O<sub>7</sub> **Batch Molecular Weight:** 391.42  
**Appearance:** White solid **Observed mp:** 139.7 - 140.9 °C  
**TLC (R<sub>f</sub>):** 0.81 DCM/MeOH/NH<sub>3</sub> (99:1:0.1)  
**Chemical Purity:** 99.2%  
**Optical Purity (ee):** N.A.  
**<sup>1</sup>H-NMR (300 MHz):** Analytical data confirm chemical structure  
**Mass Spec:** Analytical data confirm chemical structure  
**Microanalysis:** Calculated: C 49.10, H 7.47, N 10.74; Found: C 49.10, H 7.36, N 10.86  
**Storage Conditions:** Desiccate at -20 °C

<b>Solubility Data:</b>	<b>Solvent</b>	<b>Solubility (mg/ml)</b>	<b>Solubility (mM)</b>	<b>Remarks</b>
	Water	39.1	>100 mM	
	0.1N NaOH (aq)			Not Tested
	0.1N HCl (aq)			Not Tested
	DMSO	36.4	92.9	
	EtOH			Not Tested

**Remarks:**

**QC Date:** 01-10-2020

The purity of Axon Ligands is confirmed by HPLC, MS, NMR and/or microanalysis. Analytical data are available upon request. Request can be submitted by e-mail to [info@axonmedchem.com](mailto:info@axonmedchem.com) indicating Catalogue ID and Batch number.

**Caution: Not fully tested. For research purposes only**