

Evan Burns

4040

## **CERTIFICATE OF ANALYSIS**

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA Tel: (416) 665-9696, Fax: (416) 665-4439 Email:orders.trc@lgcgroup.com Website: www.trc-canada.com

1. Identification					
			CAE		
Catalogue Number:	D2887	40	CAS Number:	111974-74-4	
		2-(2-hydroxyethoxy)ethyl] pine Dihydrochloride	Synonym:	11-(1-Piperazinyl)-dibenzo[b,f][1,4]thiazepine Dihydrochloride; DBTP; Norquetiapine; Quetiapine EP Impurity B;	
Structure:		NH		Molecular Formula:	
		$\langle \rangle$		C17H17N3S • 2HCl	
		N= 		Molecular weight: 295.4 + 2(36.46)	
			CI		
				Source of Product:	
				N/A	
				Solubility:	
				DMSO (Slightly, Heate Sonicated), Ethanol (S Heated), Methanol (Sli	lightly,
Lot Number:	17-SBL	-101-1	Purity:	98%	
Shipping	Thic Dr	oduct Is Stable To Be	Storage		
Condition: Shipped At Room Temperature					
2. Warning					
Warning 1:		Warning	2:	Warning 3:	
3. Analytical 1	Informati	ion			
Tests:		Specifications:		Results:	
Elemental Analysis		Conforms		%C: 53.45, %H: 5.62, %N: 11.03	
Appearance		White to Pale Yellow Solid		Off-White to Pale Yellow Solid	
MS		Conforms to Structure		Conforms	
NMR		Conforms to Structure		Conforms	
Chloride Content		Report Result		16.5%	
HPLC Purity		Report Result		100.00% (255 nm)	
Water Content		Report Result		~3.6% based on Elemental Analysis	
Additional	Informat	ion: N/A			
Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm$ 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.					
4. Signatures					
<b>Reviewed By</b>		KEVIEWEU DV	C of A Appro Sy	ved Test Date	Retest Date
Evan Burns			Chanell Chu	7/2/2021	6/30/2025

Ghandd Ghu