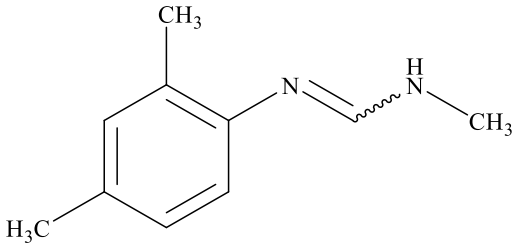


Certificate of Analysis

Certificate No.: 20200630033

Date: June 30, 2020

Retest date: June 22, 2023

Compound Name:	Amitraz Impurity 3	
Synonyms:	<i>N'</i> -(2,4-dimethylphenyl)- <i>N</i> -methylformimidamide	
TLC Catalogue Number:	A-285004	
CAS Number:	33089-74-6	
Molecular Weight:	162.24	
Molecular Formula:	C ₁₀ H ₁₄ N ₂	
Source:	TLC Pharmaceutical Standards	
Source Lot No.:	3941-017A3	
Storage Conditions:	Store at 2-8 °C	
Solubility:	Methanol, DMSO, DMF	

Test Description	Specifications	Results
Visual Description	Pale pink solid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	99.4%
Impurity (HPLC)	RT 2.13, 0.47%; RT 13.73, 0.16%	
Water Content (KF)	N/A	0.6%
Residual Solvents (NMR)	0.3% <i>n</i> -hexane	
Assay (%)	Not less than 90.0%	98.5%
Recommendation:	Released.	

Name	Department	Signature	Date
Reviewed and approved by:	Analytical Services		
Approved by:	Quality Assurance		

Attachments: HPLC, IR, MS and NMR spectra.