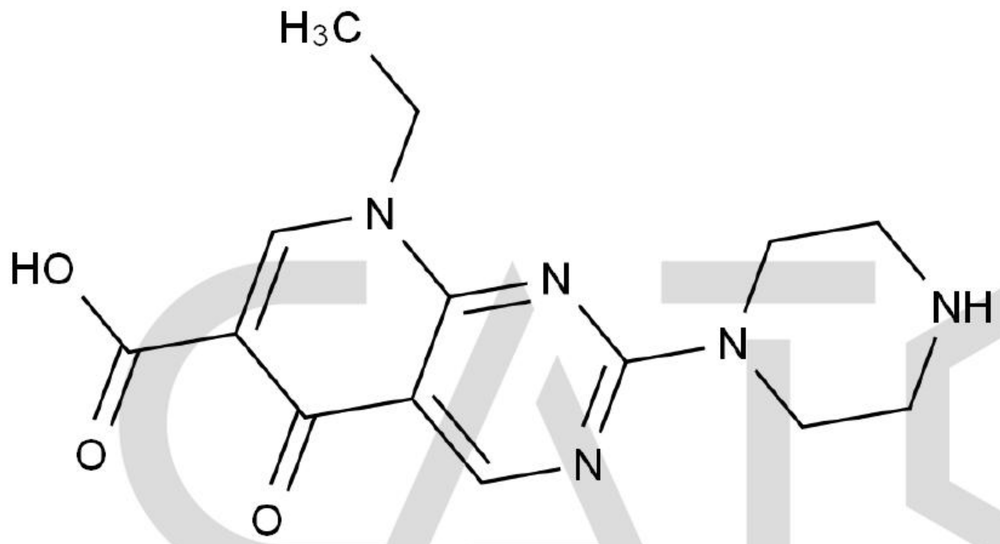
Certificate of Analysis

Reference Material & Standard

Product Name:	Pipemidic Acid	**Catalogue Number:**	CCAD300367
Synonyms:	N/A	**Lot Number:**	1115-RE-0086
CAS Number:	51940-44-4	**Expiry Date:**	Nov 14, 2027
Molecular Formula:	C14H17N5O3	**Storage:**	Room Temp Protected from light and Sealed
Molecular Weight:	303.32	**Warning:**	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	96.343%
Loss On Drying	TGA	0.2175%
Assay		96.1%
Uncertainty		±2.0%

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Comment:

1. The calculation of the 100% method follows the formula (calculated on the non-dried basis):
*Assay (%) = (100%-Loss On Drying) * Purity HPLC (%) /100%*
Loss On Drying is considered as absolute effect, HPLC purity is considered as relative effect.
2. The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by: Lisa Date: Nov 21, 2023

Reviewed by: Hinlam Date: Nov 21, 2023

Aporoved by General Manager: David Date: Nov 21, 2023

CATO Research Chemicals Inc.