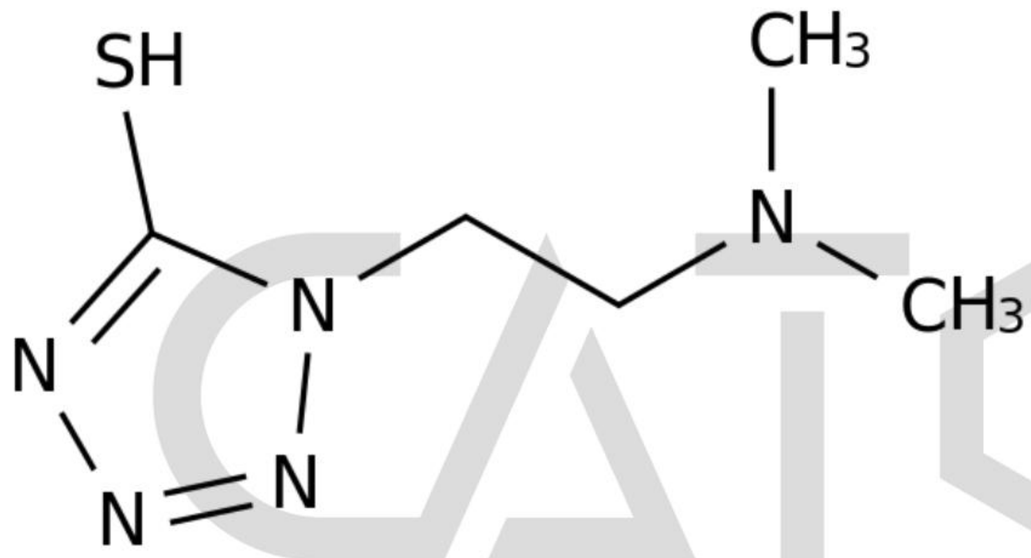
Certificate of Analysis

Reference Material & Standard

Product Name:	Cefotiam Impurity 41	**Catalogue Number:**	C4X-120441
Synonyms:	1-(2-Dimethylaminoethyl)-5-mercaptotetrazole	**Lot Number:**	0930-RH-0028
CAS Number:	61607-68-9	**Expiry Date:**	Sep 29, 2030
Molecular Formula:	$C_5H_{11}N_5S$	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	173.24	**Shipping Condition:**	Shipping at Room Temperature
		Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Off-White Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	100.000%
Loss on Drying	TGA	3.2991%
Assay	Mass Balance	96.7%

CATO Research Chemicals Inc.

Comment:

The calculation of the mass balance 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.

Signature:

Prepared by: Koji Date: Sep 30, 2026

Reviewed by: Yuki Date: Sep 30, 2026

Approved by General Manager: David Date: Sep 30, 2026

CATO Research Chemicals Inc.