

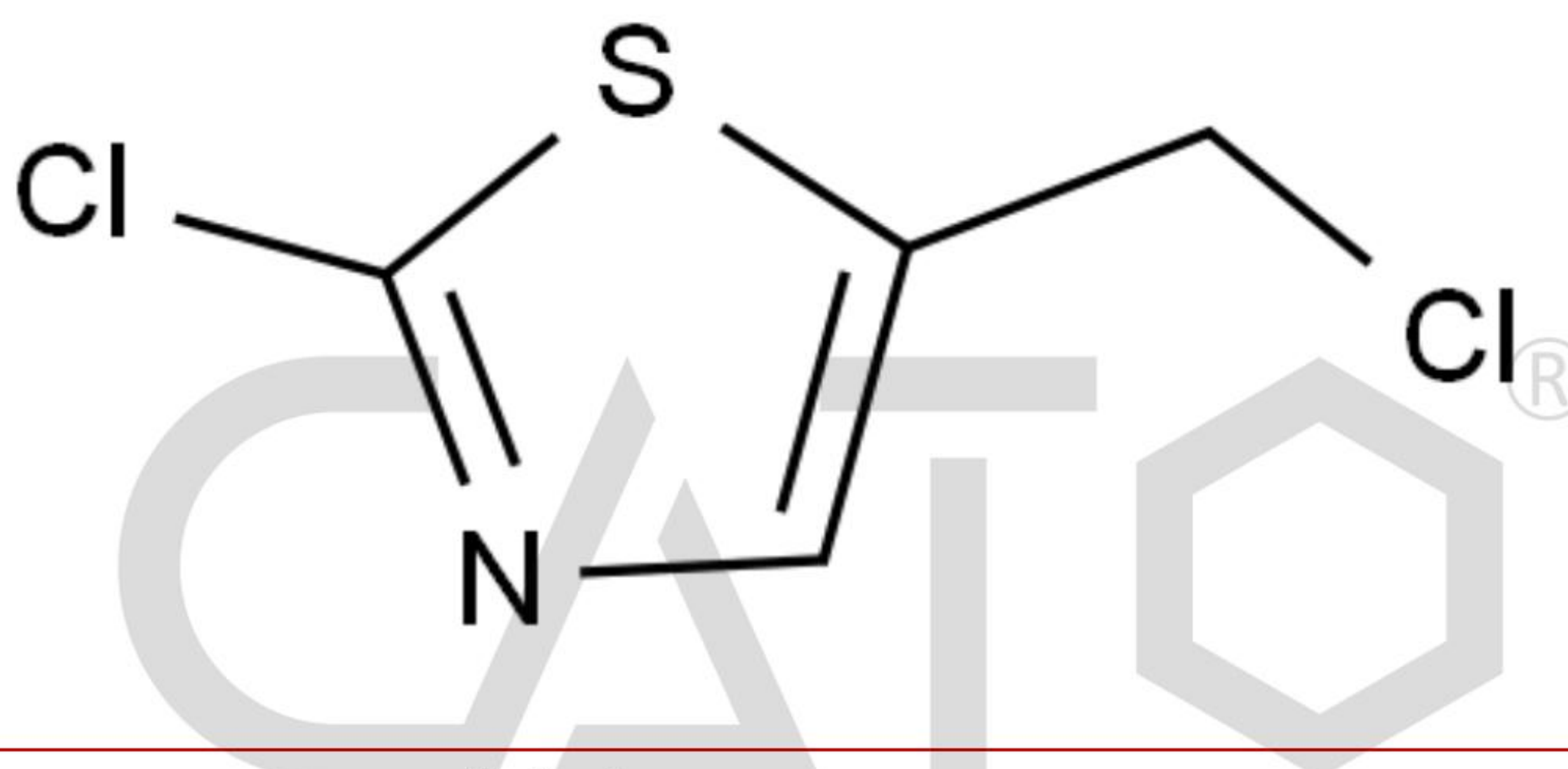
Certificate of Analysis

Reference Material & Standard

Product Name:	2-Chloro-5-(chloromethyl)thiazole	Catalogue Number:	CCPD100948
Synonyms:	N/A	Lot Number:	0514-RA-0007
CAS Number:	105827-91-6	Expiry Date:	Jun 12, 2029
Molecular Formula:	C ₄ H ₃ Cl ₂ NS	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	168.04	Warning:	



Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Yellow Solid
Identification	GCMS&HNMR	Confirmed
Purity	GC	99.176%
Water Content	Karl Fischer	0.0912%
Assay		99.1%
Uncertainty		±0.3%

Comment:

1. The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Water Content) * Purity GC (%) / 100%

Water Content is considered as absolute effect, GC 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:

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Reviewed by:

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Approved by General Manager:

David

Date: Jun 13, 2025

Date: Jun 16, 2025

Date: Jun 16, 2025

