

Certificate of Analysis

Reference Material & Standard

Product Name:	Alpha-Alpha-Dichlorotoluene	Catalogue Number:	CCEM500440
Synonyms:	N/A	Lot Number:	0429-RG-0066
CAS Number:	98-87-3	Expiry Date:	May 02, 2028
Molecular Formula:	C ₇ H ₆ Cl ₂	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	161.03	Shipping Condition:	Shipping with Ice Packs

Warning:



Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Clear Colourless Oil
Identification	CNMR&HNMR	Confirmed
Purity	GC	97.89%
Water Content	Karl Fischer	0.4321%
Assay		97.5%
Uncertainty		±0.5%

Comment:

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

$$\text{Assay (\%)} = (100\% - \text{Water Content}) * \text{Purity GC (\%)} / 100\%$$

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:

Nice

Reviewed by:

Koi

Approved by General Manager:

David

Date: Feb 28, 2026

Date: Mar 02, 2026

Date: Mar 02, 2026

