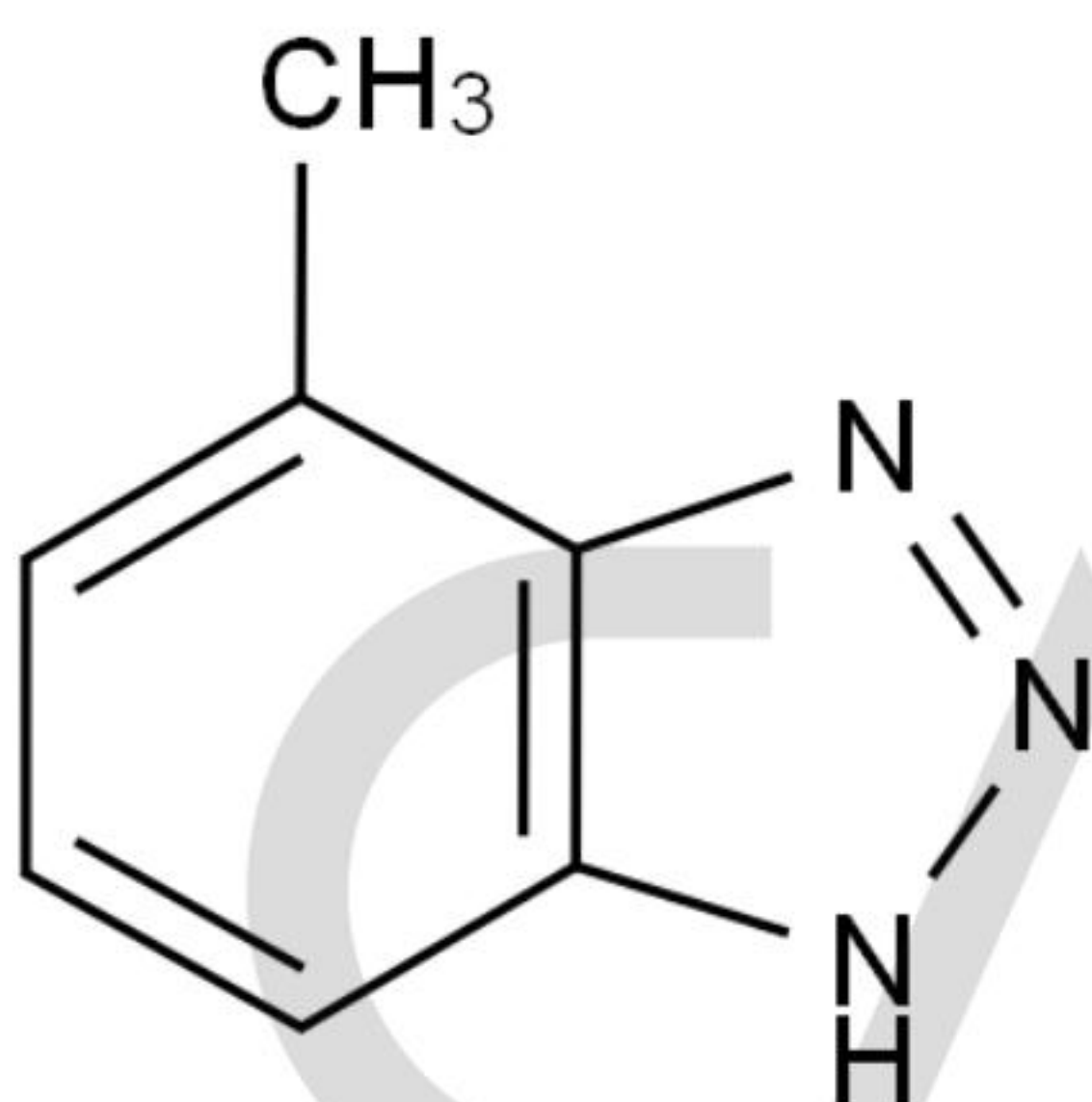


Certificate of Analysis

Reference Material & Standard

Product Name:	4-Methylbenzotriazole	Catalogue Number:	CCHM703958
Synonyms:	N/A	Lot Number:	0404-RE-0011
CAS Number:	29878-31-7	Expiry Date:	Apr 06, 2027
Molecular Formula:	C ₇ H ₇ N ₃	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	133.15	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Brown Powder
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	98.693%
Water Content	Karl Fischer	2.2160%
Assay		96.5%
Uncertainty		±2.0%

Comment:

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

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

Water Content 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:

Hin Lam

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Apr 07, 2023

Date: Apr 10, 2023

Date: Apr 10, 2023

