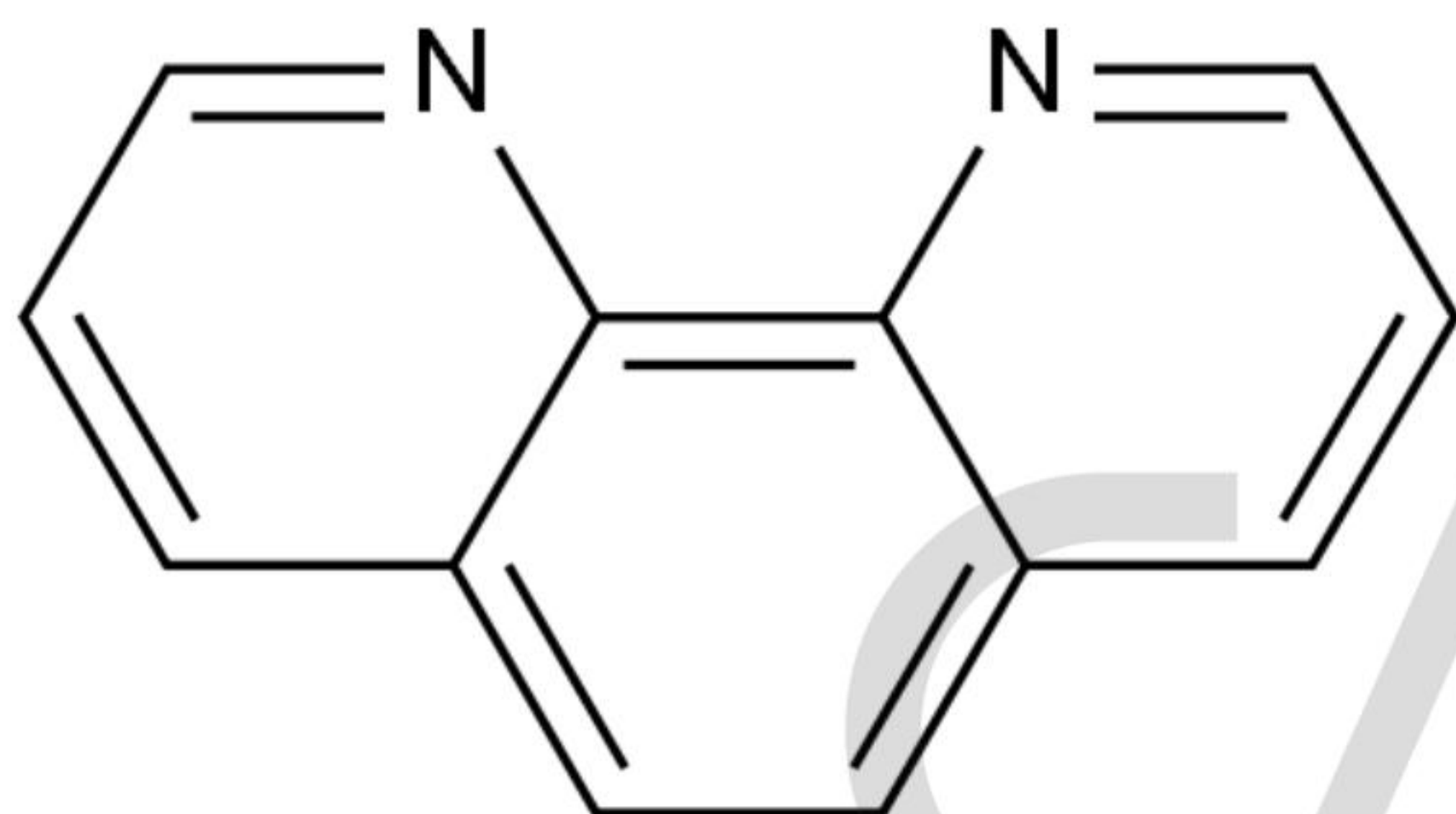


Certificate of Analysis

Reference Material & Standard

Product Name:	1,10-Phenanthroline	Catalogue Number:	CS376180
Synonyms:	N/A	Lot Number:	0526-RE-0009
CAS Number:	66-71-7	Expiry Date:	Jun 08, 2027
Molecular Formula:	C ₁₂ H ₈ N ₂	Storage:	Room Temp Protected from light and Sealed
Molecular Weight:	180.21		
Chemical Structure:			



Warning:



Test Items	Method	Results
Appearance	Visual inspection	White Powder
Identification	GCMS&HNMR	Confirmed
Purity	GC	96.313%
Loss On Drying	TGA	6.4797%
Assay		90.1%
Uncertainty		±2.0%

Comment:

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

$$\text{Assay (\%)} = (100\% - \text{Loss On Drying}) * \text{Purity GC (\%)} / 100\%$$

Loss On Drying 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: 古雪

Reviewed by:

Lisa

Aproved by General Manager:

David

Date: Jun 09, 2023

Date: Jun 09, 2023

Date: Jun 09, 2023

