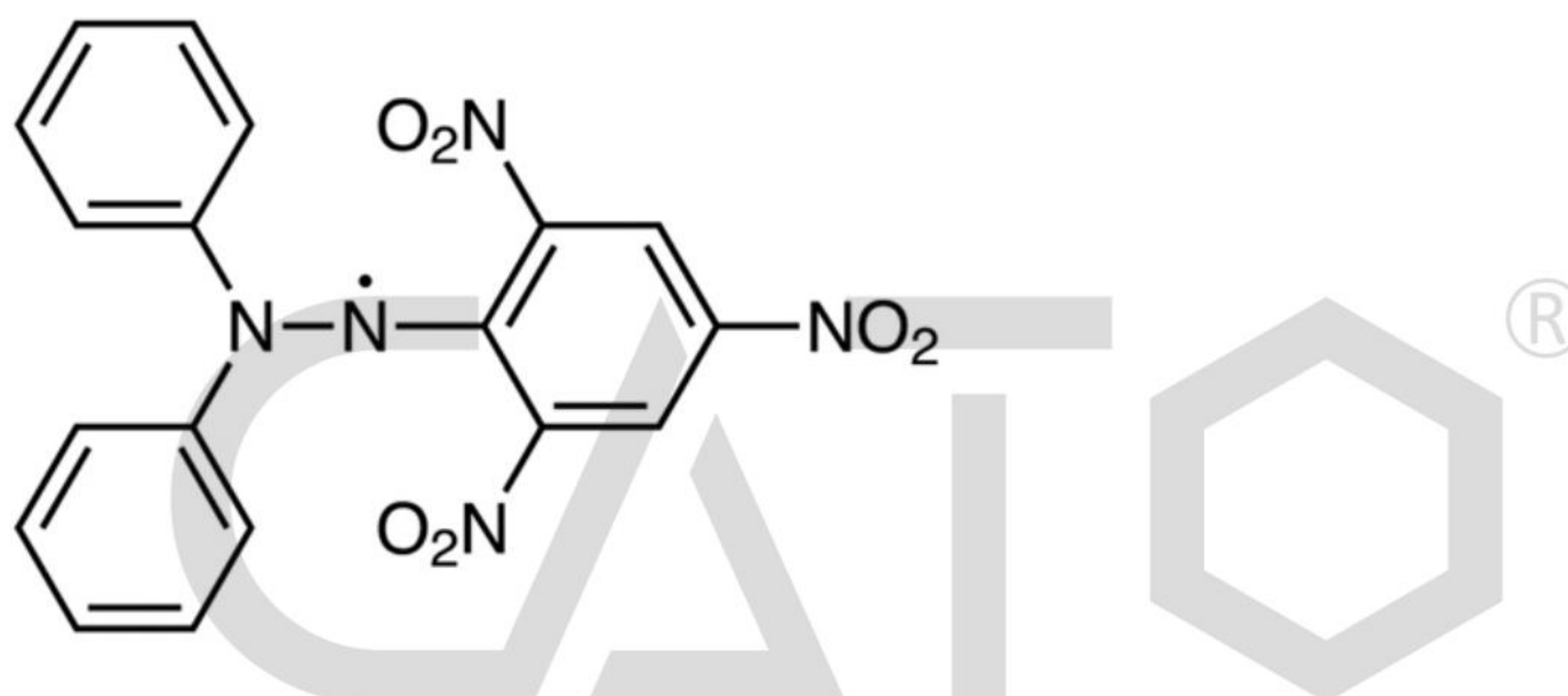


Certificate of Analysis

Reference Material & Standard

Product Name:	2,2-Diphenyl-1-Picrylhydrazyl (Free Radical)	Catalogue Number:	CCHM700589
Synonyms:	N/A	Lot Number:	0822-RG-0089
CAS Number:	1898-66-4	Expiry Date:	Aug 28, 2029
Molecular Formula:	C18H12N5O6	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	394.32	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Black Solid
Identification	LCMS	Confirmed
Purity	HPLC	99.040%
Loss On Drying	TGA	0.8205%
Assay		98.2%
Uncertainty		±0.3%

Comment:

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

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

Loss On Drying 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:

Nice

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Aug 29, 2025

Date: Aug 29, 2025

Date: Aug 29, 2025

