



CERTIFICATE OF ANALYSIS

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1. Identification

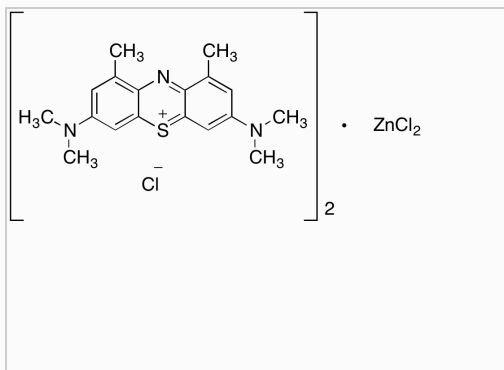
Catalogue Number: D469355

CAS Number: 931418-92-7

Product: 1,9-Dimethyl-methylene Blue Zinc Chloride Double Salt (Technical Grade)

Synonym:

Structure:



Molecular Formula:

$(C_{18}H_{22}ClN_3S)_2 \cdot$

Molecular weight:

695.81 + 136.29

Source of Product:

N/A

Solubility:

Acetone (Slightly), Methanol (Slightly), Water (Slightly)

Lot Number: 12-TAH-156-1

Purity: Technical Grade

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: 4°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Very Dark Blue to Black Solid	Very Dark Blue Solid
Elemental Analysis	Conforms	%C: 45.52, %H: 5.13, %N: 8.76
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
Chloride Content	Report Result	12.3%
FT-IR	Conforms to Structure	Conforms
UV Absorbance	Report Result	247 nm, 288 nm, 594 nm. 647 nm
Water Content	Report Result	4.2% by Karl Fischer

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm 2\%$. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Neha Khanna	Toni Rantanen	Chanell Chu	10/12/2021	10/10/2025