



## CERTIFICATE OF ANALYSIS

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### 1. Identification

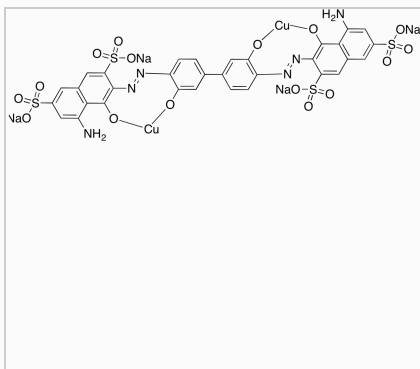
**Catalogue Number:** D492970

**CAS Number:** 28407-37-6

**Product:** Direct Blue 218 (Technical Grade)

**Synonym:** [Tetrahydrogen-3,3'-[(3,3'-dihydroxy-4,4'-biphenylene)bis(azo)]bis[5-amino-4-hydroxy-2,7-naphthalenedisulfonato](4-)]di-Copper Tetrasodium Salt;

**Structure:**



**Molecular Formula:**

$C_{32}H_{16}Cu_2N_6Na_4O_{16}S_4$

**Molecular weight:**

1087.81

**Source of Product:**

N/A

**Solubility:**

DMSO (Sparingly), Methanol (Slightly), Water (Sparingly)

**Lot Number:** 2022-CPO-102

**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 to Black Solid
NMR	Conforms to Structure	Conforms
FT-IR	Conforms to Structure	Conforms
UV Absorbance	Report Result	224 nm, 327 nm, 604 nm

**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
Henry Tieu	Toni Rantanen	Chanell Chu	1/3/2023	1/1/2027