



CERTIFICATE OF ANALYSIS

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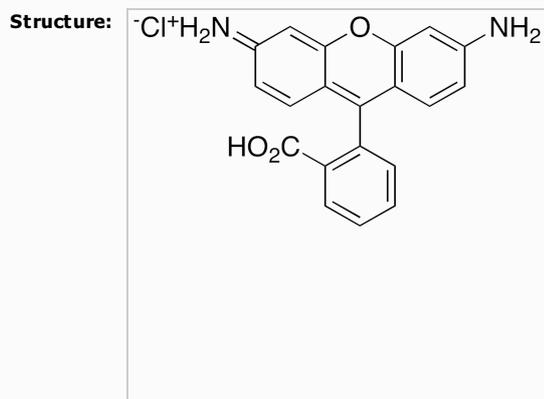
1. Identification

Catalogue Number: R318580

CAS Number: 13558-31-1

Product: Rhodamine 110

Synonym: 3,6-Diamino-9-(2-carboxyphenyl)xanthylium Chloride; 2-(6-Amino-3-imino-3H-xanthen-9-yl)benzoic Acid Monohydrochloride; 3,6-Diamino-9-(2-carboxyphenyl)xanthylium Chloride; R 110; RH 110; Rhodamine 560; Rhodamine N;



Molecular Formula:

C₂₀H₁₅ClN₂O₃

Molecular weight:

366.8

Source of Product:

N/A

Solubility:

Aqueous Acid (Slightly),
DMSO (Slightly), Methanol
(Slightly)

Lot Number: 23-JPO-55-1

Purity: 95%

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

Storage Condition: -20°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Dark Red to Very Dark Red Solid	Dark Red to Very Dark Red Solid
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
Chloride Content	Report Result	7.2%
UV Absorbance	Report Result	291 nm, 335 nm, 499 nm
Elemental Analysis	Conforms	%C: 58.04, %H: 4.25, %N: 6.95
Water Content	Report Result	~6.5% based on Elemental Analysis

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 ± 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	8/16/2022	8/14/2026

