



CERTIFICATE OF ANALYSIS

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA
Tel: (416) 665-9696, Fax: (416) 665-4439
Email:orders.trc@lgcgroup.com Website: www.trc-canada.com

1. Identification

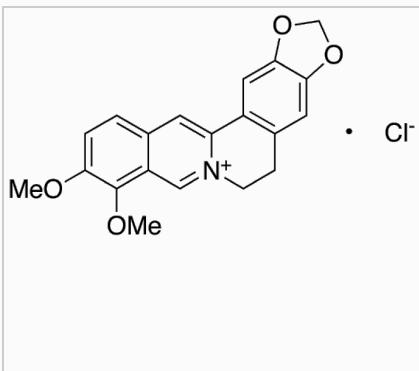
Catalogue Number: B318150

CAS Number: NA

Synonym: 5,6-Dihydro-9,10-dimethoxybenzo[g]-1,3-benzodioxolo[5,6-a]quinolizinium Chloride; Berberine Chloride Hydrate; 7,8,13,13a-Tetrahydro-9,10-dimethoxy-2,3-(methylenedioxy)berbinium Chloride Hydrate; Berberine Hydrochloride; NSC 646666 Hydrate;

Product: Berberine Chloride Hydrate

Structure:



Lot Number: 19-JPO-146-2

Purity: 95%

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

Storage Condition: -20°C

Molecular Formula:

$C_{20}H_{18}ClNO_4 \bullet xH_2O$

Molecular weight:

371.84 + x(18.02)

Source of Product:

N/A

Solubility:

DMSO (Slightly), Methanol (Slightly)

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Pale Yellow to Yellow Solid	Yellow Solid
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 55.93, %H: 5.73, %N: 3.26
HPLC Purity	>95%	98.59% (345 nm)
Chloride Content	Report Result	7.9%
Water Content	Report Result	13.3% 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
Evan Burns	Toni Rantanen	Chanell Chu	6/8/2021	6/8/2025

Evan Burns

