NATURE SCIENCE TECHNOLOGIES

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CERTIFICATE OF ANALYSIS

Emodine

LOT EX0235

Catalog No.: NST-10-73

CAS No.: 518-82-1

Molecular formula: $C_{15}H_{10}O_5$

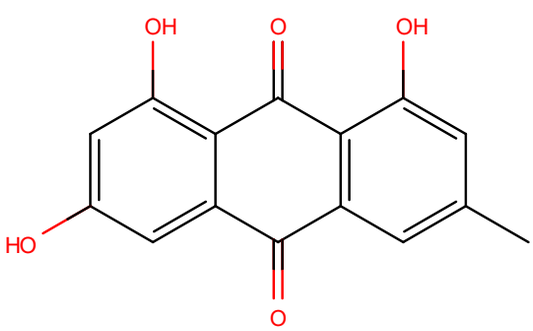
MW: 270.24

Botanical name: *Reynoutria japonica*

Manufacturing date: 19.03.2026

Analysis date: 24.03.2026

Shelf life: 24 months



No.	Parameter	Specification	Results	Method
1.	Appearance	Solid	Conforms	Visual
2.	Color	Yellow to dark orange	Conforms	Visual
3.	Identification	Conforms	Conforms	NMR&HPLC
4.	Assay	≥98.0 %	99.86 %	HPLC
5.	Purity	≥99.0 %	99.72 %	HPLC
6.	Any unspecified impurity	≤0.1 %	0.09 %	HPLC
7.	Catenarin	≤0.1 %	ND	HPLC
8.	Physcion	≤0.5 %	ND	HPLC
9.	Total impurities (sum of all impurities that are >0.05 by HPLC area %)	≤1.0 %	0.28 %	HPLC
10.	Sulphated ash	≤0.2 %	0.06 %	In house
11.	Water	≤5.0 %	0.98 %	KF

12.	Methanol	≤3000 ppm	Conforms	GC
13.	Ethyl Acetate	≤5000 ppm	Conforms	GC
14.	Benzene	≤2 ppm	Conforms	GC
15.	NN’-Dimethylformamide	≤880 ppm	Conforms	GC
16.	Lead	≤1 ppm	ND	ICP-MS
17.	Arsenic	≤1 ppm	ND	ICP-MS
18.	Mercury	≤0.1 ppm	ND	ICP-MS
19.	Cadmium	≤3 ppm	ND	ICP-MS

Storage: store in a cool and dry place, keep away from strong light and heat

Stability: 24 months when properly stored

Issued by
Nature Science Technologies Ltd.

Signature:



Date: 24.03.2026

This Certificate of Analysis is based on the manufacturer's quality control documentation for the referenced batch.