NATURE SCIENCE TECHNOLOGIES

E-mail: inquiries@nstchemicals.com
nstchemicals.com
Phone: +371 24220280

QUALITY SPECIFICATION

Limonin

Catalog No.: NST-10-13

CAS No.: 1180-71-8

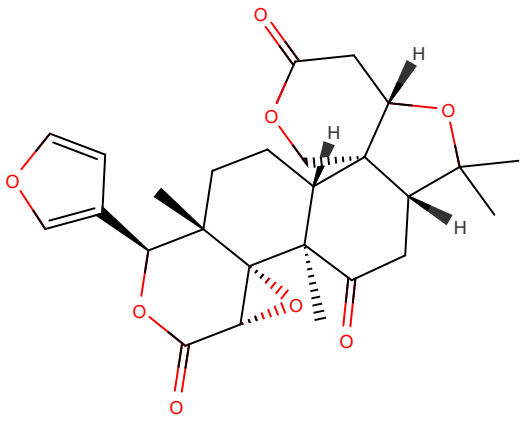
Molecular formula: $C_{26}H_{30}O_8$

MW: 470.51

Botanical source: *Citrus x aurantium*

Part used: seed

Shelf life: 24 months



No.	Parameter	Specification	Method
1.	Appearance	Fine powder	Visual
2.	Color	Off-white	Visual
3.	Identification	Conforms	TLC
4.	Assay (on dried basis)	≥98.0 %	HPLC
5.	Odor	Characteristic	Organoleptic
6.	Taste	Characteristic	Organoleptic
7.	Residue on ignition	≤2.0 %	USP <281>
8.	Loss on drying	≤5.0 %	USP <731>
9.	Mesh size/sieve	≥95 % pass 80 mesh	80 mesh
10.	Bulk density	≤0.8 g/ml	USP <616>
11.	Solvent residues	USP <467>	GC
12.	Heavy Metals	≤10 ppm	ICP-MS
13.	Lead	≤2 ppm	ICP-MS
14.	Arsenic	≤1 ppm	ICP-MS

15.	Mercury	≤0.1 ppm	ICP-MS
16.	Cadmium	≤1 ppm	ICP-MS
17.	TPC	$<10^3$ CFU/g	USP <2021>
18.	TYMC	$<10^2$ CFU/g	USP <2021>
19.	*Escherichia Coli*	Absent	USP <2022>
20.	*Salmonella*	Absent	USP <2022>
21.	*Staphylococcus aureus*	Absent	USP <2022>

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

Stability: 24 months when properly stored