

TAPYADI LOHA (WITH RAJATA)

Monograph No. – 050011 ver 3.0

Issue No: 03

Amendment No : 01

Date of Issue: 30/11/2017

Amendment Date : 08/04/2023

Text Reference : Bharat Bhaishajya Ratnakar 2/2562

Shelf Life: 10 years

Description Dark gray to black colour powder, odour characteristic, taste slight bitter.



Loss on Drying at 105° Not more than 5 % w/w

Ash Not more than 55 % w/w

Acid Insoluble Ash Not more than 41 % w/w

Water soluble extractive Not less than 27 % w/w

Alcohol soluble extractive Not less than 7.5 % w/w

pH 4.0 – 5.5

Bulk Density 0.7 – 1.3

Elemental Assay

Iron (Fe) 8.0 – 14.0 % w/w

Silver (Ag) 8.0 – 12.0 % w/w

Copper (Cu) NLT 1.0 % w/w

Thin Layer Chromatography

Solvent system Toluene : Ethyl acetate
(7 : 3)

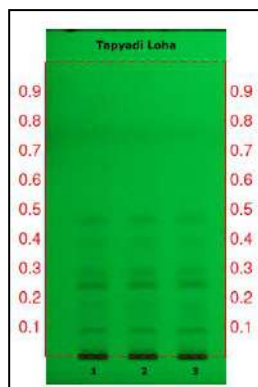
Details

Solvent of Extraction – Methanol

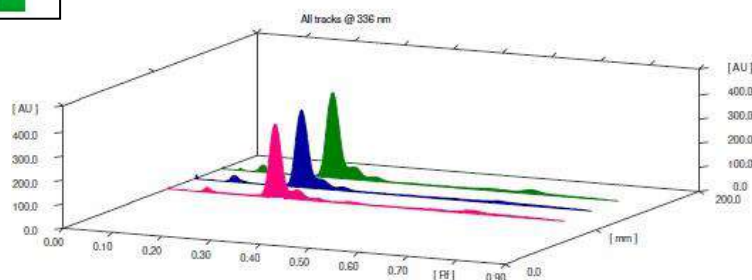
Solvent front – 90 mm

Total No. of Major spots – 6

Detection – Under UV at 254 nm.



Major Spots	Colour	Approx. Rf.
1	Black	0.08
2	Light gray	0.15
3	Black	0.23
4	Light gray	0.29
5	Light gray	0.39
6	Light gray	0.45



3D Peak Display of Tapyadi Loha 336 at nm

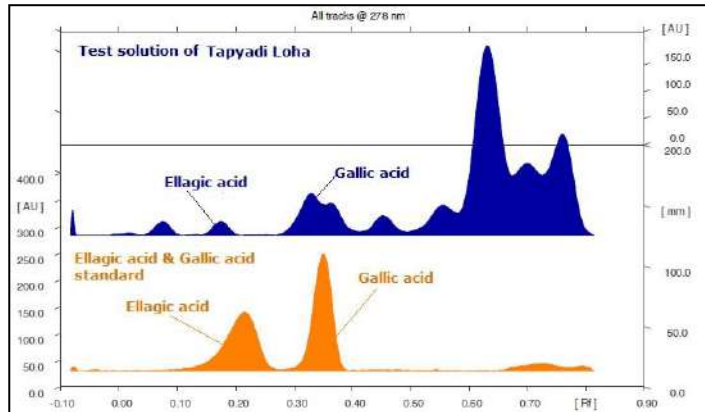
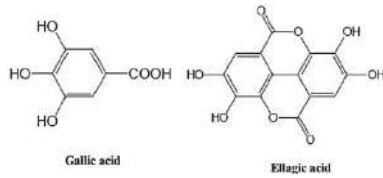
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Note : † : These extra tests can be performed on every batch at extra cost. Tests can be ascertained on request.

HPTLC Profile[†]

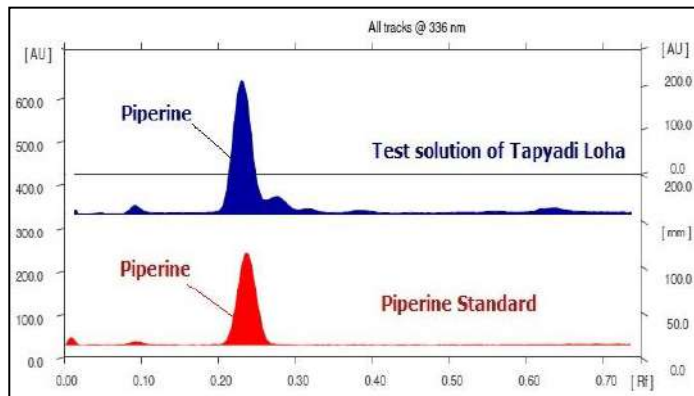
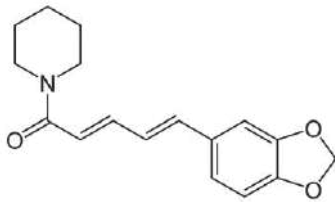
i) Total Polyphenols (as Gallic acid & Ellagic acid)

When examined in the range of 200 nm to 400 nm, the test solution shows absorption maxima at about 290 nm for Gallic acid & 278 nm for Ellagic acid corresponding with Gallic acid & Ellagic acid standard.



ii) Piperine

When examined in the range of 200 nm to 400 nm, the test solution shows absorption maxima at about 336 nm corresponding with Piperine standard.



<i>E. coli</i>	Absent/g
<i>P. aeruginosa</i>	Absent/g
<i>Salmonella sp.</i>	Absent/g
<i>Staphylococcus sp.</i>	Absent/g
Total Microbial plate count (TPC)	NMT 10 ⁵ c.f.u./g
Total Yeast & Mould count (TYMC)	NMT 10 ³ c.f.u./g
Pesticide Residue[†] (OC+OP)	Complies as per API
Aflatoxins B1,B2,G1,G2[†]	Complies as per API