

CERTIFICATE OF ANALYSIS

Product Name	Motherwort Herb
Botanical Latin Name	Leonurus cardiaca L.
Country of Origin	Ukraine
Part of Plant	Herb (flowering aerial parts)
Fraction	Whole or cut
Batch Number	4188-0824
Crop Year	2024
Shelf Life	October 2028

Organoleptic specification

Analysis Item	Specification	Result
Colour	Upper leaf surface green with scattered hairs; lower surface paler; corolla pink upper lip & white lower lip with purplish spots; stems greying-green/brownish-green	Complies
Odour	Weak	Complies
Flavor	Bitterish	Complies

Physical and chemical requirements

Analysis Item	Specification	Result
Moisture content (mass fraction)	NMT 12.0% (EP 8.0 2.2.32)	8.75%
Total ash (mass fraction)	NMT 12.0% (EP 8.0 2.4.16)	9.13%
Acid insoluble ash (mass fraction)	NMT 6.0% (EP 8.0 2.8.1)	1.27%
Foreign matter (stems) content	NMT 46.0% (EP 8.0 2.8.2)	38.44%

Foreign matter (brown/yellow leaves) content	NMT 2.0% (EP 8.0 2.8.2)	0.13%
Foreign matter (others) content	NMT 2.0% (EP 8.0 2.8.2)	0.0%
Sum of flavonoids (as hyperoside)	NLT 0.2% (EP 8.0 01/2013:1833)	0.27%
Extractive matter by 70% ethanol	NLT 15% (ΦC.2.5.0034.15)	17.33%

Contaminants

Analysis Item	Specification	Result
Mercury (Hg)	NMT 0.1 mg/kg (EP 11.0 monograph 1433; EP 11.0 2.4.27)	Complies
Lead (Pb)	NMT 5.0 mg/kg (EP 11.0 monograph 1433; EP 11.0 2.4.27)	Complies
Cadmium (Cd)	NMT 1.0 mg/kg (EP 11.0 monograph 1433; EP 11.0 2.4.27)	Complies
Arsenic (As)	NMT 0.5 mg/kg (QGC.1.5.3.0009.15)	Complies
PAH: Benzo[a]pyrene	NMT 10 µg/kg (Reg. (EU) 2023/915; GC-MS)	Complies
Sum of PAH4	NMT 50 µg/kg (Reg. (EU) 2023/915; GC-MS)	Complies
Ochratoxin A	NMT 10 µg/kg (Reg. (EU) 2023/915; EP 11.0 2.8.22)	Complies
Aflatoxin B1	NMT 2 µg/kg (Reg. (EU) 2023/915; EP 11.0 2.8.18)	Complies
Aflatoxins (B1, B2, G1, G2)	NMT 4 µg/kg (Reg. (EU) 2023/915; EP 11.0 2.8.18)	Complies
TA (tropane alkaloids)	NMT 25 µg/kg (Reg. (EU) 2023/915; LC-MS/MS)	Complies
PA (pyrrolizidine alkaloids)	NMT 200 µg/kg (Reg. (EU) 2023/915; EP 11.0 2.8.26)	Complies

Perchlorate	NMT 75 µg/kg (Reg. (EU) 2023/915; LC-MS/MS)	Complies
Pesticides (MRLs)	Limits comply with Reg. (EC) No 396/2005 (+ amendments); LC-MS/MS; GC-MS	Complies
Cesium Cs-137	NMT 400 Bq/kg (EU Council Regulation (Euratom) 2016/52; QGC.1.5.3.00011.15)	Complies
Strontium Sr-90	NMT 200 Bq/kg (EU Council Regulation (Euratom) 2016/52; QGC.1.5.3.00011.15)	Complies

Microbiological parameters

Analysis Item	Specification	Result
Total aerobic microbial count, CFU/g	≤ 10 ⁷ (EP 8.0 5.1.8; EP 8.0 2.6.12)	10 ⁴ max
Salmonella	Negative in 25 g (EP 8.0 5.1.8; EP 8.0 2.6.31)	Negative in 25 g
Yeasts & moulds, CFU/g	≤ 10 ³ (EP 8.0 5.1.8; EP 8.0 2.6.12)	10 ⁴ max
E. coli, CFU/g	≤ 10 (EP 8.0 5.1.8; EP 8.0 2.6.31)	< 10 max

Allergen information (Reg. (EU) 1169/2011)

Analysis Item	Specification	Result
Cereals containing gluten (wheat, rye, barley, oat, spelt, kamut or hybrids)	Absent	Conforms
Crustaceans and products thereof	Absent	Conforms
Egg and egg products	Absent	Conforms
Fish and fish products	Absent	Conforms
Peanut and peanut products	Absent	Conforms
Soya and soya products	Absent	Conforms

Milk and dairy products (incl. lactose)	Absent	Conforms
Nuts (almonds, hazelnut, walnut, cashew, pecan, para, pistachio, macadamia/Queensland)	Absent	Conforms
Celery and celery products	Absent	Conforms
Mustard and mustard products	Absent	Conforms
Sesame and sesame products	Absent	Conforms
Sulphites/SO ₂ >10 mg/kg or 10 mg/L	Absent	Conforms
Lupin and lupin products	Absent	Conforms
Molluscs and products thereof	Absent	Conforms

Packaging & Storage

Shelf life	48 months in original packing and storage at conditions below.
Labeling	Product name, origin, net weight, gross weight, expiry date, batch no.