

# SELECT BOTANICAL

## PEPPERMINT LEAF

### Technical-Scientific report

#### GENERAL INFORMATION

Select Botanical, SL manufactures highest quality extracts following strictest Quality Management System in compliance with the "Good Manufacturing Practices" requirements, carrying on the last manufacturing steps in classified areas (Clean Rooms).

Select Botanical, SL assures the traceability with rigorous analysis from raw material to finished product.

#### REGISTRY NUMBERS

**CAS:** 84082-70-2  
**EINECS:** 282-015-4  
**INCI/ UE:** MENTHA PIPERITA LEAF EXTRACT

#### INFORMATION ABOUT PLANT ORIGIN

#### SPECIFICATIONS/ TECHNICAL CHARACTERISTICS

##### Raw material

**Definition:** Leaves of *Mentha x piperita* L.  
**Description:**  
- Macroscopic Complies Ph.Eur. current Ed  
- Microscopic Complies Ph.Eur. current Ed  
**Pesticides:** According to Ph. Eur. current ed.  
**Assay (HPLC)** Rosmarinic acid

##### Composition of Extract Preparation

Native Dry Extract  
Maltodextrin  
Colloidal Silicon Dioxide

##### Extract Specifications

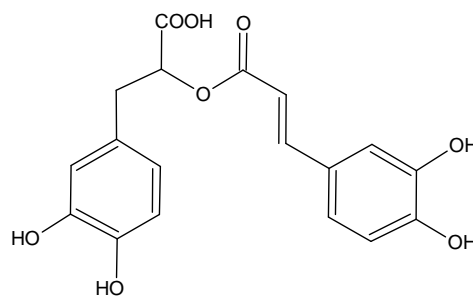
**Loss on drying:** ≤ 6 % w/w  
**Total ash:** ≤ 10 % w/w  
**Heavy metals:** Analysis of Pb,As,Cd and Hg  
**Microbiological assay:** Acc. to Ph. Eur. current Ed. "5.1.8.Point B"  
**Residual solvents:** According to guidelines CPMP/ICH/283/95  
**Assay (HPLC):** Rosmarinic acid

#### Botanical Description

A plant, with a distinctly 4 angled stem and decussate leaves, growing to a height of about 60 cm. The flowers are pale red in spicate whorls. <sup>(1)</sup>

#### Analytical marker / Active principle

**Hydroxycinnamic acid derivatives:** Rosmarinic acid



Rosmarinic acid

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### PHARMACOLOGICAL STUDIES

- sb Antispasmodic activity: Alcoholic extracts of Peppermint leaf have antispasmodic effects on the isolated guinea pig ileum. <sup>(3,7)</sup>
- sb Choleric activity: Peppermint leaf stimulated bile secretion and the synthesis of bile acids. <sup>(3,7)</sup>
- sb Carminative activity: In human pharmacological studies, Peppermint leaf extract has a carminative action by causing a reduction in tonus of the oesophageal sphincter, thus enabling release of entrapped air. <sup>(3,7)</sup>

### PHYTOTHERAPY

#### Activities

##### Oral use:

- sb Carminative. <sup>(1, 2, 3, 5, 6,7)</sup>
- sb Spasmolytic. <sup>(1, 2, 5, 6,7)</sup>
- sb Stimulate the bile secretion. <sup>(1, 2, 3, 5, 6,7)</sup>

#### Indications:

##### Oral use.

- sb Traditional herbal medicinal product indicated for the symptomatic relief of digestive disorders such as dyspepsia and flatulence. <sup>(1,3, 6, 7)</sup>

#### Side effects:

There are no reported toxic effects or intolerance phenomenon to normal use doses. <sup>(3, 6)</sup>  
The gastro-oesophageal reflux may worsen and heartburn may increase. <sup>(7)</sup>

#### Precautions / Contraindications:

Patients with gastro-oesophageal reflux (heartburn) should avoid peppermint leaf preparations, because heartburn may increase. <sup>(7)</sup>

Patients with gallstones and any other biliary disorders should be cautious using peppermint leaf preparations. <sup>(7)</sup>

The use in children under 4 years of age is not recommended as there is no experience available. <sup>(7)</sup>

If symptoms worsen during the use of the medicinal product, a doctor or a qualified health practitioner should be consulted. <sup>(7)</sup>

#### Dosage and administration:

##### Traditional oral use <sup>(7)</sup>:

Adults, elderly (*daily dose*)

Herbal tea: 4.5 - 9 g of the herbal substance, divided in three single doses.

Tincture: 6-9 ml, divided in three single doses.

### BIBLIOGRAPHY AND OTHER REFERENCES SOURCES

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