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 form raw material to finished product.

SPECIFICATIONS/ TECHNICAL CHARACTERISTICS

**Raw material**

- **Definition:** Leaf of *Olea europaea* L.
- **Description:**
  - Macroscopic: Complies Ph. Eur. current ed
  - Microscopic: Complies Ph. Eur. current ed
- **Loss on drying:** ≤ 10 % w/w
- **Pesticides:** Acc.to Ph. Eur. III current ed
- **Assay (HPLC):** Oleuropein

**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, Hg, Cd and As
- **Microbiological assay:** Acc.to Ph. Eur. current Ed. “5.1.8.Point B”
- **Residual solvents:** According to guidelines CPMP/ICH/283/95
- **Assay (HPLC):** Oleuropein

REGISTRY NUMBERS

- **CAS:** 84012-27-1
- **EINECS:** 232-277-0
- **INCI/ UE:** OLEA EUROPAEA LEAF EXTRACT

INFORMATION ABOUT PLANT ORIGIN

**Botanical Description**

*Olea europaea* is a small and evergreen tree, averaging 20 feet or more in height. It has many thin branches with opposite branchlets and shortly stalked, opposite, lanceolate leaves, acute, entire and smooth, pale green above and silvery below. The bark is pale grey and the flowers numerous, small and creamy-white in colour. Native to the Mediterranean Region.

**Analytical marker / Active principle**

**Secoiridoids:** Oleuropein

![Oleuropein](image)
OLIVE LEAF
Technical -Scientific report

PHARMACOLOGICAL STUDIES

Oleuropein and hydroxytyrosol, two phenolic compounds contained in olive, are known to possess several biological properties, many of which may be related, partially at least, to their antioxidant and free radical-scavenger ability. (10)

- Cardiovascular system effects: studies have shown that oleuropein possesses a wide range of pharmacologic and health promoting properties including antiarrhythmic, cardio-protective, hypotensive and anti-inflammatory effects. (10)

- Hypoglycaemic activity: oleuropein leaf accelerates the intake of glucose to the cell. An ethanolic extract from olive leaves inhibited α-amylase. (10)

- Hypocholesterolemic activity: hypocholesterolemic effect of oleuropein, oleuropein aglycone and hydroxytyrosol rich extracts might be due their abilities to lower serum TC, TG and LDL-C levels as well as slowing the lipid peroxidation process and enhancing antioxidant enzyme activity. (10)

Oleuropein is therefore able to strongly reduce the action of UV rays on the skin, which is the main cause of the skin ageing and wrinkles. (7)

PHYTOTHERAPY

Activities

Oral use:
- Antioxidant. (4, 6, 7, 10)
- Hypocholesterolemic. (5, 10)
- Hypoglycaemic. (10)
- Hypotensive. (1, 10)
- Coronary dilator. (1, 10)
- Antiarrhythmic. (1, 10)

Topical use:
- Antioxidant. (7)

Indications:

Oral use:
- Indicated in the treatment of the arteriosclerosis, mild to moderate hypertension and hyperglycemia. (1)

Topical use:
- Indicated in wrinkled skin (anti-ageing products). (7)

Undesirable effects:

There are no reported toxic effects or intolerance phenomenon to normal use doses. (1, 2)

Dosage and administration:

Oral use:
Olive Tree Extract may be found formulated in liquid and solid preparations for oral administration.

Topical use:
Olive Tree Extract may be found formulated in creams, emulsions and ointments, among others.

BIBLIOGRAPHY AND OTHER REFERENCES SOURCES

5. De Pasquale, R., Monforte, M.T., Trozzi, A., Racuia, A. “Effects of leaves and shoots of Olea europaea L. and oleuropein on experimental hypercholesterolemia in rat”. Pharmaco-Biological Department, School of Pharmacy, Messina.