Ginkgo Biloba extracts

Description
EUROMED ginkgo biloba extracts are standardized herbal extracts of Ginkgo biloba L. leaves, a “fossil tree” growing in Oriental Asia and today widely cultivated as medicinal plant in Korea, the south-east of France and the United States.

Chemistry
A multitude of polar and apolar compounds have been isolated in ginkgo biloba leaves: aliphatic alcohols and ketones, organic acids, sesquiterpenes (bilobalide) and saccharides. Interesting compounds from the therapeutic point of view are flavonoids and diterpenes.

The flavonoids are represented by about twenty flavonol glycosides, quercetin and kaempferol 3-rhamnosides and quercetin and kaempferol, and by biflavonoids (amentoflavone, bilobetol, 5-methoxybilobetol...). Ginkgo biloba leaves also have flavan-3-ols and proanthocyanidins. Ginkgo biloba diterpenes, known as ginkgolides A, B, C, J and M, have a hexacylic structure characterized by a spiro- [4,4]-nonanic sequence, a tert-butyl group, and three lactones rings.

Indications
Extracts of ginkgo biloba leaves are proposed to treat the symptoms of senile cerebral insufficiency, memory loss associated with aging, early stages of Alzheimer's disease, poor circulation to the extremities, intermittent claudication, tinnitus and hearing loss. Ginkgo biloba extracts have antioxidants activity and ability to inhibit platelet aggregation, which are critical in the prevention of circulatory diseases.

Contraindications, interactions and side-effects
Ginkgo biloba extract is generally well tolerated, but it is contraindicated in patients known to be hypersensitive to ginkgo biloba preparations. In less than 1 percent of patients mild gastrointestinal complaints may occur and patients with poor blood flow may experience a mild, transient headache for the first and second days of use.

Due to the inhibitory effect on the platelet-activating factor (PAF) it could interact with antithrombotic therapies. Contraindications to the use of ginkgo biloba extracts during pregnancy or lactation have not been reported.
**Analytical Specifications**

- **Denomination**: GINKGO BILOBA DRY EXTRACT
- **Used plant drug**: Ginkgo biloba L.
- **Used plant parts**: Leaves
- **Aspect**: Fine powder, brown colour
- **Identification**: HPLC fingerprint
- **Loss on drying**: Max. 5.0%
- **Assay**
  - Type 1: Ginkgo flavonglycosides min. 24.0 % (HPLC). Terpene lactones min. 6.0% (HPLC)
  - Type 2: Ginkgo flavonglycosides 7.5-7.8% (HPLC)
- **Microbiology**: Acc. Ph. Eur. 5.1.4, cat. 3B

**Selected References**

- www.euromed.es

**EUROMED S.A.**
Carrer Rec de Dalt 21-23
Polígon Can Magarola
E-08100 Mollet del Vallès
Barcelona (Spain)
Tel. (34) 93 544 0110
Tel. (34) 93 544 0111
www.euromed.es

**EUROMED U.S.A., Inc.**
11214 Club House Road
Nevillewood, PA 15142
Tel. +1-412-279 88 08
Fax +1-412-279 88 09
joev@euromedusa.com

**EUROMED France**
95 Route du Morgon
69 400 Gleize
Tel. +33(0)4 74 60 53 52
Fax +33(0)4 74 60 54 65
hkergoisen@wanadoo.fr

**EUROMED Canada**
17240 26A Avenue
Surrey, British Columbia V3S 0E6
Tel. +1-604-535 44 03
Fax +1-604-535 98 51
euromedcanada@shaw.ca

**EUROMED Germany**
Lütticher Str. 5
53 842 Troisdorf
Tel. +49-221-8998691
Fax +49-221-8998693
jklapperich@euromed.es