# Master data ingredient / monograph

Ingredient/plant: Lavender (Lavandula angustifolia)

Scientific name: Lavandula angustifolia

Order: Lamiales Family: Lamiaceae Genus: Lavandula

Species: Lavandula angustifolia

## **Description:**

Lavandula angustifolia (also Lavandula spica or Lavandula vera; common Lavender, true lavender, or inaccurately, "English" Lavender; formerly L. officinalis) is a flowering plant in the family Lamiaceae, native to the western Mediterranean region, primarily in the Pyrenees and other mountains in northern Spain. It is not native to England despite being commonly called 'English lavender' in some regions.

It is a strongly aromatic shrub growing to 1-2 m tall. The leaves are evergreen, 2-6 cm long and 4-6 mm broad. The flowers are pinkish-purple (lavender-coloured), produced on spikes 2-8 cm long at the top of slender leafless stems 10-30 cm long. It is commonly grown as an ornamental plant. It is popular for its colourful flowers, its fragrance and its ability to survive with low water consumption. It does not grow well in continuously damp soil. It is fairly cold hardy, generally considered hardy to USDA zone 5.

## **Properties:**

In addition to its use as an ornamental plant, the flowers and leaves are also used as an herbal medicine, either in the form of lavender oil or as an herbal tea. The flowers are also used as a culinary herb, most often as part of the French herb blend called herbes de Provence.

## Pharmacological properties:

#### Active ingredients

Lavender flowers contain:

- essential oil 1,0 3,0 %: main components are: (-)-linolool, linayl acetate, cisacimene, terpinen-4-ol,  $\beta$ -caryophyllene, lavanduyl acetate.
- Hydroxy cumarines: umbelliferone, herniarine
- caffeic acid and rosemaric acid
- tanning agents

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In 1936 it could be shown that the active ingredients of lavender show properties stimulating the bile flow from the gall bladder. In vitro studies revealed antimicrobial properties.

Animal studies show an neurotropic effect (shortening of time of getting to sleep, prolongation of dormancy) and an reduction of motoric activity (Atanassova-Shopova S. et Roussinow K.S. 1970). In humans evidence was found, that the essential oil of lavender shows a sedative effects upon the limbic system, comparable to nitrazepam (Guillemain J. et al. 1989; Buchbauer G. et al. 1991).

## Topical and cosmetic properties:

Lavender essential oil, when diluted with a carrier oil, is commonly used as a relaxant with massage therapy. Products for home use including lotions, eye pillows including lavender flowers or the essential oil itself, bath oils, etc. are also used to induce relaxation.

#### Possible interactions:

If used, as intended, essential oil of lavender do not exert any harmful effects. The potential capacity of causing sensitisation effects is very weak.

#### Use:

Due to their relaxing and calming effects Lavender flowers are widely used in aromatherapy, especially in cases of sleep disorders, nervous disorders and uneasiness. Furthermore Lavender flowers are used as supportive measures for wound healing.

The german commission E recommends in their monographs, dated 1984 and 1990, the use of Lavender in the aromatherapy. Experimental data support the positive effects in cases of sleep disorders and nervous complaints. There exists a positive monograph for the following indications: nervous disorders, sleep disorders, Roemheld-syndrome, meteorism, nervous disorders of stomach and intestine. In case of external administration the german commission E pointed out, that the essentail oil of lavender flowers have undoubtedly stimulating effects on wound healing.

## Limits of administration:

None

# Assessment/safety factors and toxicity:

Essential oil of Lavender is generally considered safe and devoid of adverse side effects when administered in recommended doses.

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## **Further remarks and characteristics:**

None

## References:

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Buchbauer G., Jirovetz L., Jäger W. et al.:

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