

ROSEMARY

Latin Name: *Rosmarinus officinalis* L.

Botanical Family: Lamiaceae syn. Labiatae

Other Common Names: see chemotypes

Extraction Information

Country of Origin: Morocco, Spain, South America
Part of Plant Used: Flowering Tops
Extraction Method: Distillation
Color of Oil: Clear – Pale Yellow

Blending Information

Odor Description: Fresh, Strong, Vibrant, and Herbaceous
Blending Factor: 2
Note: Middle to Top
Blends Well With: Eucalyptus sp., Laurel, Lemon, Tea Tree, Juniper berry, Lemongrass, Monarda, Rosalina, Grapefruit, Thyme

Indicated For: Used in skincare due to its regenerative abilities, also indicated for rosacea, acne, seborrhea (oily skin with congestion), varicose veins



Chemistry

Chemical Feature: Rosemary and Biochemical Specialty

Chemotypes are essential oils which have been extracted from one botanical species yet yield essential oils distinctly different and unique chemical compositions (usually one chemical compound is higher than the norm). Environmental conditions such as light, soil, temperature, moisture, climatic influence and altitude as well as geographic area can all affect the chemistry of a given species.

Botany:

Rosmarinus officinalis is an aromatic evergreen flowering shrub that grows from 3 – 6 ft tall. The numerous branches have an ash-colored, scaly bark and bear opposite, leathery, thick leaves that are lustrous, linear, dark yet bright green above and downy white underneath. The

pale blue/lilac flowers grow in short racemes, and both the leaves and flowers are highly aromatic. The shrub is native to the Mediterranean region, where it grows alongside the seashore, hence its Latin name which means 'Dew of the sea.'

History + Myth

Rosemary has been associated with memory and fidelity since the famed times of the Egyptians. It has been used at funerals, religious ceremonies, weddings, and as an emblem for fidelity. Shakespeare's 'Ophelia' echoed these associations when she spoke 'There's rosemary, that's for remembrance; pray, love, remember.' The word 'Rosmarinus' can be translated to 'dew of the sea' which is reflected by Rosemary's attraction to growing along the coastal region. Rosemary and juniper were once utilized in French hospitals to reduce microbes and purify the air. Rosemary is used in folk medicine for digestive symptoms, headaches and migraines, dysmenorrhea, amenorrhea and oligomenorrhea (infrequent or very light menstruation), states of exhaustion, dizziness and poor memory.¹

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Rosemary ct. camphor

Country of Origin: Spain, Croatia, South Africa

Therapeutic Actions

Mild analgesic, anti-rheumatic, antiviral, carminative, cephalic, circulatory, decongestant/stimulant, digestive, mucolytic, muscle relaxant, vulnerary

Safety Information

Hazards: May be neurotoxic, based on camphor content. (Oral)

Has GRAS status²

Chemical Feature:

Rich in camphor, 1,8 cineole and supported by monoterpenes

Core Aromatic Applications:

- Stimulates and increases the flow of energy within the body
- Can Improve short term memory, energizing, cephalic
- Circulatory decongestant and vein stimulant: blend with black pepper and marjoram³
- Useful for alleviating cramping pains in the legs⁴
- Muscle relaxant, considered to be the most specific for neuromuscular problems including muscular aches and pains, cramps, spasms, and neuralgic and rheumatic pain⁵
- Indicated for the treatment of arthritic conditions
- Muscle cramps, constipation, flatulence, varicose veins
- Clears the mind

Chemical Composition

Chemical Composition of *Rosmarinus officinalis* ct. *camphor*

Monoterpenes	α -phellandrene (0.46%), α -pinene (4.55-24.8%), α -terpinene (0.6%), β -myrcene (0.61-4.06%), delta-3-carene (0.12-0.62%), camphene (2.92-10.65%), β -pinene (2.92-0.05%), d-limonene (1.18-6.23%), para-cymene (1.42-2.11%), terpinolene (0.2%)
Sesquiterpenes	α -humulene (0.47-0.89%), β -caryophyllene (1.93-2.68%)
Monoterpene alcohols	α -terpineol (1.19-1.55%), borneol (2.36-3.05%), linalool (0.88-1.55%), terpinen-4-ol (0.75%), myrtenol (0.12%)
Esters	linalyl acetate (0.2%), bornyl acetate (1.47%)
Ketones	Camphor (12.39-27.72%) , verbenone (1.6-2.6%), octanone (0.30-1.61%)
Oxides	1,8 cineole (16.88-19.07%) , caryophyllene oxide (0.12%)

www.aromaticsinternational.com/rosemary-ct-camphor104?keyword=rosemary and www.florihana.com (Rosemary camphor ct ref. FLE075)

Varela F, Navarrete P, cristobal R, Fanio M, Melero R, Sotomayor J A, Jordan M J, Cabot P, Sanchez de Ron, D, Calvo R, Cases A. (n/d). Variability in the chemical composition of wild *Rosmarinus officinalis* L.

Rosemary ct. 1,8 cineole

Country of Origin: Tunisia

Safety Information: **Hazards:** May be neurotoxic, based on camphor content (oral)

Contraindications: Do not apply to or near the face of infants or children.⁶

Has GRAS status

Therapeutic Actions: Mild analgesic, antibacterial, anti-catarrhal, antifungal (*Candida albicans*), anti-rheumatic, antispasmodic, antiviral, carminative, cephalic, digestive, expectorant, mucolytic, muscle relaxant, vulnerary

Chemical Feature

Rich in 1,8 cineole and supported by sesquiterpenes

Core Aromatic Applications

Chemical Composition

Chemical Composition of *Rosmarinus officinalis* ct. 1,8 cineole

Monoterpenes	α-pinene (14.799%) , camphene (5.69%), β-pinene (4.63%), myrcene (1.323%), α-phellandrene (0.22%), α-terpinene (0.55%), limonene (2.615%), gamma-terpinene (0.725%), p-cymene (1.562%), terpinolene (0.287%)
Sesquiterpenes	β-caryophyllene (2.961%), α-humulene (.028%), gamma-cadinene (0.094%), α-copaene (1.61%)
Monoterpene alcohols	borneol (2.54%), linalool (0.83%), terpinene-4-ol (0.53%), α-terpineol (1.424%)
Esters	bornyl acetate (0.627%)
Ketones	camphor (12.98%) , verbenone (0.136%)
Oxides	1,8 cineole (43.376%)

www.florihana.com Rosemary ct cineole Lot #: B120314MA

- Respiratory system: Has a direct correlation with the respiratory and pulmonary systems of the body, Expectorant, respiratory decongestant, excellent mucolytic, anti-catarrhal applications, sinusitis.
- Antifungal agent⁷
- Antibacterial agent (e.g. Staphylococcus aureus, Staph. alba)⁸ “As a bactericide, the cineole ct. is effective in treating newly-forming tissue in ulceration; it can be added to creams or lotions or diluted in a saline solution in a spray bottle to mist over and irrigate the ulcerated tissue.”⁹
- Fluidifies bronchial secretions, muscular antispasmodic, cerebral tonic, stimulated mental functions¹⁰
- Rosemary ct. cineole is useful for the elderly who show syndromes of impaired mental functioning, with reduced cerebral activity and decreased neuronal plasticity.¹¹
- Rosemary 1,8 cineole has an analgesic effect on the muscles by means of its tonic effect on the circulation, which not only improves the nutrition of the muscle fibers but also helps eliminate lactic acid.¹²
- Indicated for chronic fatigue, fatigue in general, excessive physical or mental activity
- Clears the mind.

Rosemary ct. verbenone

Country of Origin: France, Corsica, South Africa

Safety Information: Hazards: May be neurotoxic, based on camphor content.¹³ (oral)

Has GRAS status

Therapeutic Actions: Mild analgesic, anti-catarrhal, anti-rheumatic, antiseptic, antiviral, carminative, cell regenerative, cephalic, endocrine regulator, expectorant, mucolytic, muscle relaxant, tonic to skin and heart, vulnerary.

Chemical Feature

Rich in monoterpene (α-pinene) supported by verbenone, camphor, and bornyl acetate

Core Aromatic Applications

Chemical Composition

Chemical Composition of *Rosmarinus officinalis* ct. verbenone

Monoterpenes α-phellandrene (0.27-0.43%), α-pinene (19.22-37.38%), α-terpinene (0.35-0.51%), β-myrcene (1.37%), γ-terpinene 0.41(1.11%), camphene (6.23-8.45%), d-limonene (3.8-4.8%), para-cymene (1.07-1.8%), terpinolene (0.47-1.13%), verbenone (0.96%), b-pinene (1.142%), delta-3-carene (0.33%)

Sesquiterpenes α-humulene (0.24%), β-caryophyllene (0.32-1.6%)

Monoterpene α-terpineol (1.06-1.2%), borneol (2.71-7.93%), geraniol (0.41-0.83%), linalool (1.5-1.825%), terpinen-4-ol (0.76-0.85%), verbenol (0.56%)

Esters **bornyl acetate (7.236-10.24%)**

Ketones verbenone (5.9-11.05%), camphor (7.42-13.81%), isopinocampone (1.41%), chrysanthenone (0.38%)

Oxides 1,8 cineole (4.88-7.88%)

www.aromaticsinternational.com/rosemary-ct-verbone104?keyword=rosemary

- Used in skincare due to its regenerative abilities, also indicated for rosacea, acne, seborrhea (oily skin with congestion), varicose veins
- Bronchitis, sinusitis, rhinitis, flu, common cold, skin care.¹⁴
- Mucolytic and expectorant
- Endocrine regulator – effective in treating post-menopausal syndrome especially hot flashes, useful for post-natal depression. Author suggests using 0.5% rosemary ct. verbenone, 0.5% *Foeniculum vulgare* (sweet fennel) and 1% geranium. Used in a cream of calendula and applied to appropriate areas of the endocrine system and armpits.¹⁵
- Post glandular fever, Rosemary ct. verbenone with tea tree and *Ravensara aromatica* in a 6% dilution in a cream base applied to the neck glands and axillae.¹⁶
- General stimulant, nerve tonic, restores psychological balance.¹⁷
- Clears the mind.

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