

ACTIFS PRÉCIEUX

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# CORIANDER SEEDS CO2 EXTRACT

# CORIANDRUM SATIVUM L. SEEDS

Coriander is an annual and herbaceous plant, belonging to the Apiaceae family. It is a culinary and medicinal plant, native of southern Europe and the western mediterranean region, this herb is cultivated world wide.

It has been used as an analgesic, carminative, digetive, antirheumatic and antispasmodic agent. Its fruits (seeds) are used for flavouring candies, in cookery, perfumery, beverages and in the tobacco industry.

It was one of the earliest spices used by mankind. It has been used as a flavouring agent in food products, perfumes and cosmetics. Coriander has been credited with many medicinal properties.

The essential oil obtained from its fruits is used both in flavours and in the manufacture of perfumes and soaps.



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# Traditional use

## Key benefits




Coriander cultivation date back to very long time ago. In Chinese and medicine and traditional European – Mediterranean medicine, coriander seeds and its preparations have been used as a digestive, carminative, stomachic and expectorant for coughs and bronchitis. It has been used topically for treatment of inflammatory skin conditions, arthritis and rheumatism.

As the coriander oil stimulates circulation, it is helpful in cellulite, effective in relieving facial neuralgia and helps to fight fungal infections. Also useful for eczema, muscular aches and pains, rheumatism, spasms, stiffness and sweaty feet. The assessors described the supercritical extract as the most terpenic and spiciest. It has the advantage of being more stable and retaining its agreeable odor longer than any other oil of its class.



# COMPOUNDS TO BE EXTRACTED



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- Small apolar, lipophilic solute (essential oils, light oils, flavors volatile ...): extraction at low pressure **(80-100 bar)**
  - Apolar compounds of high molecular mass (lipids, fatty acids ...): extraction at intermediate pressure **(100-200 bar)**
  - Large lipophilic compounds (waxes, resins ...): extraction at high pressure **(300- 400 bar)**
  - Amphiphilic compounds (pigments): extraction at **(300 bar)** + co-solvent (ethanol) or **(400-600 bar)** pressure without co-solvent
  - Small polar compounds (flavorings,): low pressure extraction + co- solvent
  - Large hydrophilic polar compounds: high pressure extraction + co- solvent

POLARITY, MASS  
INCREASING  
MOLECULAR

# CORIANDER SEEDS CO<sub>2</sub> SELECTIVE EXTRACT

## **For SC-CO<sub>2</sub> selective extraction:**

At low pressure, supercritical CO<sub>2</sub> can selectively extract volatile compounds from Coriander, and give an extract rich in aromatical compound, in oily form. (Low temperature and low pressure allow us to preserve the quality of the raw material unlike the other extraction methods).

Coriander selective extract is composed mostly of linalool.

Linalool is a fragrance ingredient used in many fragrance compounds. It may be found in fragrances used in decorative cosmetics, fine fragrances, shampoos, toilet soaps and other toiletries.

The Coriander CO<sub>2</sub>-extract of dried seeds has a fresh, sweet, spicy, peppery and woody odor with floral and citrus nuances.

The extract is:

- 100% Natural
- Free from solvent
- Free from chemical compounds
- Loaded with vitamin E and antioxidants
- Oil soluble
- Sustainably sourced



# CORIANDER SEEDS CO2 TOTAL EXTRACT

## **Coriandrum sativum SC-CO2 total extract :**

Is composed of petrosilinic acid which is an unsaturated fatty acid a cis-form, being the cis-form of petroselinic acid offers the opportunity to produce chemical derivatives different from those which can be produced from other oils.

It's the particularly preferable unsaturated fatty acid used in cosmetic as an ingredient in hair tonics having an effect of extending the growth phase of the hair by maintaining and promoting the growth action of the hair roots.

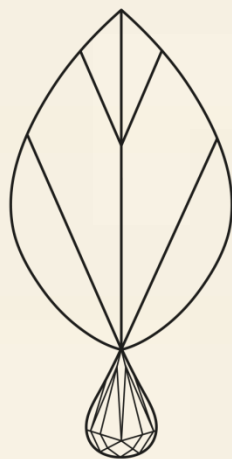
It can also be added to a cosmetic composition to reduce or eliminate skin Irritation, it is a perfect moisturizer for dry skin when used in a cosmetics. In addition, due to linalool presence coriander extract is recommended for skin infections' treatment as it has Anti-acne and anti inflammatory properties.

In addition the coriander extract is effective for use as preservative in cosmetic application.

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