

Ethically Sourced Ingredients

SIBERIAN FIR CO2 SUBCRITICAL EXTRACT

Suitable for beauty and personal care applications.

INCI: Abies Sibirica (Siberian Fir) Extract

Extraction Method: CO2 Subcritical Extraction

Shelf Life: 5 Years Origin: Australia

Background:

A member of the Pinaceae (Pine) plant family, Siberian Fir Trees, *Abies sibirica*, are majestic coniferous evergreens with short, flat, highly aromatic needles. The trees are native to the boreal forests spanning Siberia and northern regions of Asia.

Praan Naturals premium quality Siberian Fir CO2 Subcritical Extract is 100% natural. It is obtained by subcritical fluid extraction using carbon dioxide as the solvent. This method effectively extracts the aromatic constituents present in the Siberian fir needles resulting in an extract that exquisitely reflects the aroma of fresh Siberian fir needles more authentically than does steam distillation. The process used in CO2 subcritical extraction tends to extract lighter weight aromatic constituents that have carbon structures ranging between C5 to C22. CO2 subcritical extracts possess many similarities to that of essential oils. However, they tend to be aromatically superior to their essential oil counterparts.

The CO2 extraction process exposes the extract to less heat and degradation during production than does steam distillation. This leads to a more prolonged, stable shelf life. Once the extraction process is complete, the CO2 dissipates back into a gaseous state. Unlike hexane and other solvent extraction processes, no trace of solvent remains in extracts produced by CO2 subcritical or supercritical extraction methods.

Ethical and Sustainable Sourcing:

Siberian Fir Needles harvested from *Abies sibirica* are classified as a stable species of least concern by The IUCN Red List of Threatened Species (International Union for Conservation of Nature and Natural Resources). Siberian Fir CO2 Subcritical Extract is a conscientious alternative to aromatic conifer oils and extracts derived from plant species that are threatened or endangered.

Our Siberian Fir CO2 Subcritical Extract is sourced from a conscientious manufacturing partner that utilizes Siberian fir needles that are collected from timber that was harvested for use in other applications. Use of the needles helps ensure that there is zero waste. The spent material that remains after subcritical processing is upcycled for wateralcohol extracts or for tea manufacturing. Any material that cannot be used is converted into fertilizer.



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Uses

Siberian Fir CO2 Subcritical Extract possesses a fresh, rejuvenating and vibrant conifer aroma that is reminiscent to the crisp, conifer aroma of a majestic, fragrant forest. Siberian Fir CO2 Subcritical Extract contains approximately 15% bornyl acetate. This ester contributes to the extract's ability to help balance the emotions without being excessively stimulating.

The natural chemical composition of Siberian Fir CO2 Subcritical Extract makes it a highly versatile, stable extract that is well suited for use within a wide array of skin/hair care, wellness, massage, natural fragrancing, seasonal and cleaning applications. Many conifer essential oils have shorter shelf lives because of their higher composition of monoterpenes and greater oxidative instability. Siberian Fir CO2 Subcritical Extract is superior for its exceptional aroma and longer shelf life.

Properties:

- 100% Pure, Natural and Authentic
- Complex, Fresh, Woody Conifer Aroma
- Medium Viscosity at Room Temperature
- Reddish Brown/Amber Hue
- Stable Shelf Life
- Refer to GC/MS Report for Composition Details

Siberian Fir CO2 Subcritical Extract is Well Suited For:

- Skin Care
- Hair Care
- Cosmetics
- Aromatherapy
- Wellness Applications

Recommended Usage: 0.01 - 5.0%

Standard Packaging: Available in aluminum canisters.



