Portuguese Certified Organic Prickly Pear Seed Oil: a powerful, multifunctional, 100% natural and pure cosmetic ingredient

Diálogos do Bosque ● Herdade dos Catos - Gralheira CCI 1304 ● 7050-636 Cortiçadas de Lavre | Portugal
The plant: *Opuntia ficus-indica* (*Cactaceae*)

**Origin**: Africa, Mediterranean countries, USA southwest, Mexico north

**Flowers**: big, colour - yellow, orange or red
PRICKLY PEAR SEED OIL

*Opuntia ficus-indica*

- Ornamentation
- Nutritive
  - Human consumption (Fresh fruit)
  - Cattle forage
- Bioactive
  - Juice from the fruit: source of sweetner and natural colorants
  - Seeds from the fruit (30-40%): important ingredients like aminoacids, highly absorbable carbohydrates, minerals, vitamin C and fibers
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PRICKLY PEAR SEED OIL

- Emollient in cosmetic products
- Barrier repair - Fatty acids high composition
- Antioxidant - Phenols
- Anti-inflammatory - Sterols
- Regenerative effect - Tocopherol and linoleic acid
PRICKLY PEAR SEED OIL

- Anti-wrinkle effect - Tocopherol and Linoleic acid
- Firming effect - Linoleic acid
- Velvety skin sensation - Linoleic acid
- Photoaging prevention - Ferrulic acid
- Safety in cosmetics
PRICKLY PEAR SEED OIL
100% pure & organic vegetable oil
selected seeds - cold pressed
PRICKLY PEAR SEED OIL: Diálogos do Bosque

**Phenol content**
- High Content
- Good antioxidant profile

444.40 mg equivalents gallic acid/g
PRICKLY PEAR SEED OIL: Diálogos do Bosque

Antioxidant activity index (Sherer et al 2009)

EC50 (sample) = 27.91 µl/ml ; AAI = 1.79

Extraction with methanol (vortex 5 minutes followed by centrifugation at 4500 rpm for 5 minutes; analysis of the top phase)
PRICKLY PEAR SEED OIL: Diálogos do Bosque

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**Linoleic acid**
- High content
- Sensorial properties
- 66.3% of total fatty acid composition

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**PRICKLY PEAR SEED OIL**
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**Appearance**
Clear and viscous yellowish liquid

**Color**
Yellow to green

**Odor**
Characteristic, greasy/oily with a nutty aroma

**Relative density**
0.897 (at 20°C)

**Refractive index**
1.4738 (at 22.4°C)

**Water solubility**
Insoluble in water
Soluble in oils and ethanol

**Phenol content**
444.40 mg equivalents gallic acid / g sample

**Viscosity**
53.34 cP
*(Newtonian fluid)*

**(CPA-40Z; DV3TR, Brookfield)**
PRICKLY PEAR SEED OIL: Diálogos do Bosque

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- High content
- Good antioxidant profile

**Linoleic acid**
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- Sensorial properties

**66.3% of total fatty acid composition**

**Biological production**
- Alentejo

**444.40 mg equivalents gallic acid/g**

Diálogos do Bosque

100% pure & organic vegetable oil selected seeds - cold pressed
• Portuguese company, specialized in the production of Prickly seed oil since 2013
• Located at Alentejo - Portugal
• Biological Certified production
• Certified unit for the preparation and transformation of cosmetic ingredient
• Best agriculture practices: fertilization, watersupply, pollination
• High standard quality of the oil: process of seed separation from the fruit, sanitation and drying of the seeds
• Cold extraction of the oil
Diálogos do Bosque

Concluding Remarks

Chemical profile with high content of linoleic acid and phenols

Different bioactivities focused on healthy skin claims - strong antioxidant

High quality standard conditions: from plant production to the oil extraction
diálogos do bosque
agricultura biológica

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