# Your Partner for Cannabinoids & Hemp Extracts





As a healthcare company, we are one of the leading Swiss manufacturers and suppliers of cannabinoid products for the wellness and pharmaceutical markets (medical cannabis). With our Wellness/Consumer Goods Division, we are one of the few companies in Europe to cover the entire value chain—from research, farming, extraction and product development to sales. With our Swiss Alpinopharma Pharma Division, we develop innovative, evidence-based medical cannabis treatments for patients.

## **Hemp extracts and CBD in cosmetics** *Great effect with increasing demand*

Cannabinoids are chemical compounds found in cannabis. The most well-known cannabinoids in the cannabis plant are the phytocannabinoid tetrahydrocannabinol (THC) and cannabidiol (CBD). There are also more than 100 other cannabinoids.

Thanks to their diverse effects, low-THC hemp extracts with cannabinoids such as cannabidiol (CBD) are enjoying increasing popularity worldwide as an ingredient in cosmetic products.

Hemp extracts and cannabinoids (especially cannabidiol, CBD) are believed to have the following effects (sources in the Appendix):

- » Anti-inflammatory
- » Antibacterial
- » Antioxidant
- » Pain relieving
- » Skin protection/care
- » Anti-sebum

We offer a wide range of hemp extracts and cannabinoids as raw materials for cosmetics production.



## **Our raw materials**

## Cannabidiol isolate, >99% CBD

INCI: CANNABIDIOL - DERIVED FROM EXTRACT OR TINCTURE OR RESIN OF CANNABIS Description & properties: White powder, crystalline, fat-soluble, odourless

We offer three CBD isolate variants and one CBG isolate:

Concentration	Description	Product code
> 99%	<b>CBD isolate from Swiss organic hemp farming</b> This isolate meets the highest quality and purity standards. The CBD is made from Bio Suisse- and GACP-certified biomass in Switzerland. This GMP quality product is guaranteed to be free of any pesti- cides, heavy metals, microbiological contaminants, mycotoxins, and residual solvents. It is suitable for use in NATRUE-certified organic cosmetic products.	A000560
<b>&gt; 99%</b>	<b>CBD isolate from conventional Swiss hemp farming</b> This isolate meets high quality standards and is also made using conventional Swiss hemp farming. The CBD isolate is free from any pesticides, heavy metals, and mycotoxins.	A000613
> 99%	<b>CBD isolate from non-European biomass</b> This CBD isolate comes from conventional biomass and is made in the USA. It is intended for use in larger quantities and for price-sen- sitive customers. This isolate is also free from pesticides, heavy metals, and residual solvents.	A000615
> 99%	<b>CBG isolate from Swiss organic hemp farming</b> This isolate meets the highest quality and purity standards. The CBG is made from Bio Suisse- and GACP-certified biomass in Switzerland. This GMP quality product is guaranteed to be free of any pesti- cides, heavy metals, microbiological contaminants, mycotoxins, and residual solvents. It is suitable for use in NATRUE-certified organic commetic products	A000730





# **Our raw materials**

### Cannabis extracts

#### **INCI:** CANNABIS SATIVA LEAF EXTRACT

**Description & properties:** Yellowish to light brown, solid and oily, fat-soluble, odour typical of hemp

We offer various cannabis extracts:

Concentration	Description	Product code
> 80%	CBD Broad-Spectrum extract from Swiss organic hemp farm- ing » CBD>80%, THC<0.1%. » Minor cannabinoids (CBG, CBC): ★★★★★ » Terpenes: ★★★★ » Production: CO <sub>2</sub> extraction and THC extraction by flash chroma- tography	A000561
> 90%	CBD Broad-Spectrum distillate from Swiss organic hemp farming » CBD>80%, THC<0.1%. » Minor cannabinoids (CBG, CBC): ★★☆☆☆ » Terpenes: ★★☆☆☆ » Production: CO <sub>2</sub> extraction and THC extraction by distillation	A000674
> 85%	CBD Broad-Spectrum distillate from Swiss conventional hemp farming » CBD>80%, THC<0.1%. » Minor cannabinoids (CBG, CBC): ★★☆☆☆ » Terpenes: ★★☆☆ » Production: CO <sub>2</sub> extraction and THC extraction by distillation	A000637



# **Legal situation** *Cannabinoids and hemp extracts are allowed*

Cosmetics law is harmonized across Europe, in particular in Regulation (EC) No. 1223/2009. Cosmetic ingredients have an international designation, a so-called INCI term (International Nomenclature of Cosmetic Ingredients). Each ingredient is also listed in the Central European register of cosmetic ingredients, COSING, either with or without restriction.

All extracts from the cannabis plant were subject to a corresponding restriction until October 2019 and were not allowed to be used in cosmetic products as cannabis and extracts from cannabis are listed in Annex 1 of the 1961 Single Convention, which the European Cosmetics Regulation directly refers to (Article 14 (1) (a) in conjunction with Annex 2 No. 306 of Regulation (EC) No. 1223/2009).

In recent years, various regulations have been lifted and ingredients have been added without restrictions.

# Raw materials from the cannabis plant approved by INCI in cosmetics

International nomenclature of cosmetic ingredients (INCI) in CosIng Catalogue of the European Commission: database by the Eu, without any restrictions (Status: January 2022):

» INCI: CANNABIS SATIVA SEED OIL

• CAS#: 89958-21-4

Functions: Skin conditioning, skin conditioning - emollient

» INCI: CANNABIS SATIVA LEAF EXTRACT • CAS #: n/a

• Functions: Skin conditioning, skin conditioning - emollient

» INCI: CANNABIDIOL - DERIVED FROM EXTRACT OR TINCTURE OR RESIN OF

CANNABIS

• CAS #: 13956-29-1

• Functions: Anti-sebum, Antioxidant, Skin conditioning, skin protecting

» INCI: CANNABIGEROL (since March 2021)

• CAS: #25654-31-3

Functions: Skin conditioning

» INCI: CANNABIDIOL – SYNTHETICALLY PRODUCED\* • CAS#: 13956-29-1

Functions: Anti-sebum, antioxidant, skin conditioning, skin protecting

INCI: CANNABIS SATIVA ROOT EXTRACT\* (since August 2021)\* • CAS#: 89958-21-4

• Functions: Antimicrobial, Antioxidant

Further changes or lifting of the restrictions are expected in the future, in particular the use of flower extract and isolate obtained from flowers and leaves.

#### THC in cosmetics

With regard to the tetrahydrocannabinol (THC) content, there are currently no legally binding guidelines for maximum amounts in cosmetics. Therefore, the country-specific THC limit value under narcotics law is applied (in most EU countries 0.2%, in Switzerland 1%).

## **Sources & references**

 Baswan, S.M., Klosner, A.E., Glynn, K., Rajgopal, A., Malik, K., Yim, S. and Stern, N. (2020). Therapeutic Potential of Cannabidiol (CBD) for Skin Health and Disorders. Clinical, Cosmetic and Investigational Dermatology, [online] 13, pp.927–942.

Available at: https://pubmed.ncbi.nlm.nih.gov/33335413/

**Abstract:** "...a body of preclinical evidence suggests topical application of CBD may be efficacious for some skin disorders, such as eczema, psoriasis, pruritus, and inflammatory conditions, confirmed clinical efficacy and elucidation of underlying molecular mechanisms have yet to be fully identified. This article provides an update on the advances in CBD research to date and the potential areas of future exploration."

**2.** Wilkinson, J.D. and Williamson, E.M. (2007). **Cannabinoids inhibit human keratinocyte proliferation through a non-CB1/CB2 mechanism and have a potential therapeutic value in the treatment of psoriasis.** Journal of dermatological science, [online] 45(2), pp.87–92.

Available at: https://www.ncbi.nlm.nih.gov/pubmed/17157480

**Abstract:** "Our results show that cannabinoids inhibit keratinocyte proliferation, and therefore support a potential role for cannabinoids in the treatment of psoriasis."

3. Oláh, A., Tóth, B.I., Borbíró, I., Sugawara, K., Szöllősi, A.G., Czifra, G., Pál, B., Ambrus, L., Kloepper, J., Camera, E., Ludovici, M., Picardo, M., Voets, T., Zouboulis, C.C., Paus, R. and Bíró, T. (2014). Cannabidiol exerts sebostatic and antiinflammatory effects on human sebocytes. The Journal of Clinical Investigation, [online] 124(9), pp.3713–3724.

Available at: https://www.ncbi.nlm.nih.gov/pubmed/25061872

**Abstract:** "Collectively, our findings suggest that, due to the combined lipostatic, antiproliferative, and antiinflammatory effects, CBD has potential as a promising therapeutic agent for the treatment of acne vulgaris."

4. Zagórska-Dziok, M., Bujak, T., Ziemlewska, A. and Nizioł-Łukaszewska, Z. (2021). Positive Effect of Cannabis sativa L. Herb Extracts on Skin Cells and Assessment of Cannabinoid-Based Hydrogels Properties. Molecules, 26(4), p.802.

Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7913911/

**Abstract:** "The obtained results indicate that hemp extracts can be a valuable source of biologically active substances that reduce oxidative stress, inhibit skin aging processes and positively affect the viability of skin cells. The analysis also showed that hydrogels based on cannabis extracts have a positive effect on skin hydration. (...) The lack of a negative effect on the metabolic activity and viability of skin cells indicate the legitimacy of including hemp extracts in the recipes of skin care cosmetics as well as medicinal preparations."

5. Palmieri, B., Laurino, C. and Vadalà, M. (2019). A therapeutic effect of cbd-enriched ointment in inflammatory skin diseases and cutaneous scars Clinical trial. Clin Ter, [online] 170(2), pp.93–99.

Available at: http://www.clinicaterapeutica.it/2019/170/2/05\_PALMIERI-VADALA.pdf

**Abstract:** "The topical administration of CBD ointment, without any THC, is a safe and effective non invasive alternative for improving the quality of life in patients with some skin disorders, especially on inflammatory background."

**6.** Atalay, S., Dobrzyńska, I., Gęgotek, A. and Skrzydlewska, E. (2020). **Cannabidiol protects keratinocyte cell membranes following exposure to UVB and hydrogen peroxide.** Redox Biology, 36, p.101613.

Available at: https://www.sciencedirect.com/science/article/pii/S2213231720308181

**Abstract:** "Together, these findings suggest that CBD could be a potential protective agent for keratinocytes against the harmful effects of irradiation and chemical environmental factors that cause oxidative stress."

## Let's grow together!

Swiss Organic Partners AG Isenrietstrasse 19 CH-8617 Mönchaltorf

> CH +41 44 508 04 78 DE +49 1577 1588 990

> > hello@swopa.ch www.swopa.ch

