

Microalgae for cosmetologists

Microalgae are naturally designed to resist several environmental aggressions. They produce pigments as sun-blockers; several metabolites to fight bacteria and virus; polysaccharides to protect themselves from outer menaces. Cosmetologists have long exploited these benefits in cosmetic formulations.



Microalgae are usually used in the form of extract, and can be mainly found in face and skin care products (anti-aging creams, refreshing or regenerative care products, emollient and as an anti-irritant). Microalgae are also introduced in formulation of sun protection and hair care products.

Our microalgae show the following bioactivities:

| Microalgae | Antioxidant Antichelating | Antiaging Antiwrinkle | Sun care | Soothing Anti-irritant | Bactericide Antiviral | Pigment | Fatty Acids |
|-----------------|---------------------------|-----------------------|----------|------------------------|-----------------------|--|--|
| Nannochloropsis | +++ | nt | + | nt | nt | B-carotene Lutein Neoxanthin | EPA ALA |
| Tetraselmis | +++ | nt | +++ | nt | nt | B-carotene Lutein Neoxanthin Violaxanthin Diadinoxanthin | EPA PA Stearic Acid |
| Phaeodactylum | + | +++ | + | nt | nt | Zeaxanthin Fucoxanthin | DPA DHA EPA |
| Porphyridium | ++ | nt | ++ | +++ | +++ | Zeaxanthin Phycocerythrin | ALA EPA |
| Isochrysis | +++ | nt | ++ | nt | +++ | B-carotene Zeaxanthin Fucoxanthin Cantaxanthin | DHA ALA Misticric Acid Oleic Acid |

nt – not tested. Results available in references: i) Custódio, L., Justo, T., Silvestre, L., Barradas, A., Duarte, C. V., Pereira, H., & Varela, J. (2012). Microalgae of different phyla display antioxidant, metal chelating and acetylcholinesterase inhibitory activities. *Food Chemistry*, 131(1), 134-140; ii) Goiris, K., Muylaert, K., Fraeye, I., Foubert, I., De Brabanter, J., & De Cooman, L. (2012). Antioxidant potential of microalgae in relation to their phenolic and carotenoid content. *Journal of Applied Phycology*, 24(6), 1477-1486; iii) Goiris, K., De Cooman, L., & Muylaert, K. (2013, April). Microalgal extracts as natural alternatives for synthetic antioxidants. In *Symposium Biorefinery for Food, Fuel and Materials 2013*. iv) Goiris, K., Muylaert, K., Foubert, I., & De Cooman, L. (2011). Microalgae as a potential novel source of antioxidants. status: published. iv) Raposo, M. F. D. J., de Moraes, R. M. S. C., & Bernardo de Moraes, A. M. M. (2013). Bioactivity and applications of sulphated polysaccharides from marine microalgae. *Marine drugs*, 11(1), 233-252.

Microalgae available as frozen pastes or freeze-dried powders!

We supply microalgae as a raw-material for further extraction. Microalgae are provided as frozen pastes or freeze-dried powders. Microalgae extracts are sold worldwide, and are already present in a great variety of products from sun cream to hair products, their potential is in no way exploited to the full.

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| State | Freeze-dried powder | Frozen paste |
| Units available | 250g, 1 kg and 4 kg | 1 kg |
| Packaging | Vacuum-packed foil bags | Plastic bags |
| Expiry date | 2 years | 1 year |

Our products are designed to be user-friendly and for trouble-free operations.

No additives, preservatives, or other chemicals are added to products.

Average dry weight of frozen pastes provided if requested.

We cultivate other microalgae upon demand.

If you have any further question, please do not hesitate to contact us.

- 2013 -

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