

# Your eco-friendly manufacturing partner for algal oils

Specialists in manufacture, extraction and processing of ingredients such as algal Omega 3 DHA / EPA lipids, protein, EPS (exopolysaccharides), ARA (arachidonic acid).

**ETHICAL PURE**  
**SMALLER LOGISTIC**  
**ECO-FRIENDLY**  
**LARGE**  
**MANUFACTURING CAPABILITY**  
**ALGAE EPA AND DHA**  
**ALGAL Om3**  
**LOW CARBON FOOTPRINT**  
**OCEAN FRIENDLY**  
**ONE OF THE LARGEST FERMENTATION FACILITIES IN THE WORLD**  
**100% SUSTAINABLE**  
**IMPACT CERTIFIED QUALITY POTENT**

**EPA**  
**DHA LOWER CARBON FOOTPRINT**  
**100% SUSTAINABLE**  
**NATURE'S SOURCE**  
**VEGAN NATURAL**  
**ECONOMICAL**  
**PLANT BASED**



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Algal oils are rich in DHA & EPA, we manufacture our oil and biomass at our production site in Bulgaria, Europe. In fact, we have one of the largest fermentation sites in the world and at 10,000 m<sup>3</sup> and we have enough capacity to fulfil the largest of orders.

## DHA and ARA for:

### ► Infant and baby formula

**DHA and ARA** algal oils provide safe, sustainable and essential key ingredients for infant and baby formula.

Omega 3 DHA (docosahexaenoic acid) is a vital component of infant formula. DHA, is a long chain omega-3 fatty acid, it's also called an Essential Fatty Acid, as it can't be made in the body - it must come from dietary sources.

DHA is essential throughout life and especially important for both brain and eye development in the foetus, babies and infants. DHA accounts for over 90% of the omega-3 fatty acids found in the brain, it's also about 25% of the brain's total fat content and 60% of the polyunsaturated fatty acids found in the retina. The brain and eyes grow rapidly during pregnancy, mothers last trimester and the first few years of an infant's life. It is especially important for pregnant mothers to obtain DHA through their diet and continually whilst breastfeeding. DHA naturally and always occurs in human breast milk. Numerous studies have shown positive results between DHA supplementation during pregnancy and neurological development in infants.



## EPA

EPA is another vital element for infant formula, while not added to infant formula in Europe or America, EPA is currently recognised as an important fatty acid and is always naturally present in breastmilk. Most Asian countries recognise EPA as important and have introduced regulations for increased use in infant formulas.

## DHA / DHA & EPA for:

### ► Food Applications

**DHA / DHA & EPA** algal oil provides essential fatty acids for food applications. There are numerous foods fortified with omega 3 EPA & DHA essential fatty acids from pasta to yogurt and cereals. Many of us aren't getting enough through our diet of oily fish or dietary supplements, a variety of functional foods have appeared in recent years to address this shortfall.

So, if you have a food already fortified with Omega or you are in the process of developing a new product, please get in touch.



## DHA / DHA & EPA for:

### ► Nutritional Supplements

**DHA / DHA & EPA** algal oil for dietary supplements, provides essential fatty acids DHA & EPA that may offer protection for heart health and cognitive function & vision.

DHA is proven essential to pre and postnatal brain development, EPA appears to be more influential for behaviour and mood.

Our algal derived omega 3 oils are safe, sustainable, 100% vegan, with a lower carbon footprint than any fish oil omega 3.



## HuvePure® DHA, ARA for:

### ► Pet food, Equine & Aquarium

**HuvePure® DHA and ARA** algal oils are manufactured and formulated for inclusion in pet food for Equine, Dogs, Cats and Aquarium.



### DHA (docosahexaenoic acid, Omega 3)

DHA is an essential omega 3 fatty acid found naturally in algae and oily fish, it is essential for the development of the brain, central nervous system and eyes in early-stage mammals. Mammals primary source of omega 3 fatty acids is from their mother's milk. Studies have shown DHA supplementation in horses may benefit from improved health, skin and coat, immunity and reproduction.

### ARA (arachidonic acid, Omega 6)

#### HuvePure® ARA

All pet food should provide essential omega-6 and omega-3 fatty acids in ratio. Sources of ARA are plant-based oils, which include flaxseed, canola, corn, soybean and corn oil. Our HuvePure® ARA oil is produced by fermentation of a specially selected fungal organism (*Mortierella alpina*) grown in controlled conditions.

### Quality Standards Guaranteed

We uphold the highest quality standards, all our production facilities are EU cGMP certified and where required, FDA approved. Our products are GRAS and EU food standards approved.

### Product Data Sheet

Omega 3 DHA, DHA & EPA

### Description

Omega 3 is a rich source of Omega 3 docosahexaenoic acid (DHA) which is derived from the marine algae *Schizochytrium sp*

### Product Specifications

The oil is available in various formulations and the typical specifications are listed below:

|                          |                                   |
|--------------------------|-----------------------------------|
| Colour :                 | Light Yellow to Orange            |
| DHA content, mg/g oil :  | 300 – 550 mg/g                    |
| EPA, DHA, mg/g oil :     | EPA 5 - 10 mg /g, DHA 400 -550 mg |
| Acid value :             | ≤ 0.5 mg KOH/g                    |
| Peroxide value :         | ≤ 5.0 meq/kg oil                  |
| Anisidine value :        | ≤ 20                              |
| Moisture and volatiles : | ≤ 0.05%                           |
| Unsataponifiables :      | ≤ 4.5%                            |

|                     |            |
|---------------------|------------|
| Trans fatty acids : | ≤ 1%       |
| Arsenic :           | ≤ 0.1 ppm  |
| Cadmium :           | ≤ 0.1 ppm  |
| Copper :            | ≤ 0.05 ppm |
| Iron :              | ≤ 0.2 ppm  |
| Lead :              | ≤ 0.1 ppm  |
| Mercury :           | ≤ 0.04 ppm |

\*Each batch produced will have its own Certificate of Analysis and will be within the same limitations.

### Stability and Storage

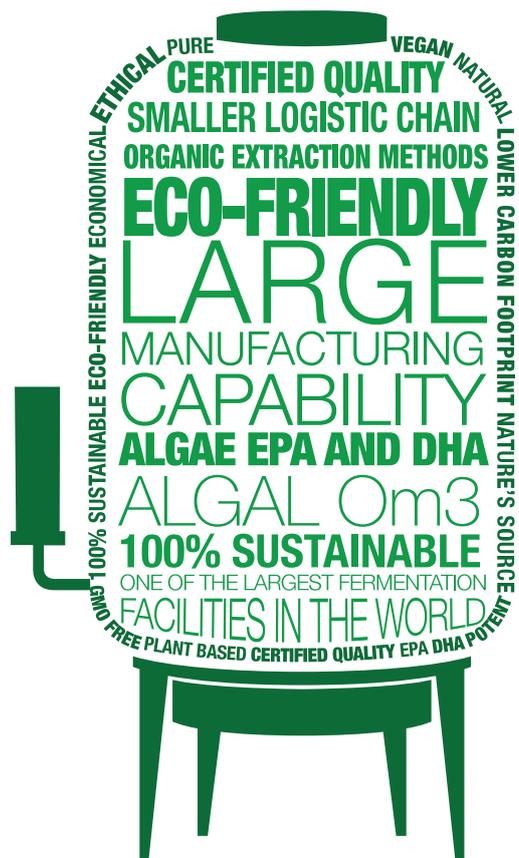
Product is recommended to be stored preferably at 20-30°C. Under these conditions the product will meet specifications for up to 1 month. It is not recommended to store the product at more than 40°C for any extended period of time.

Refrigerated storage <4°C will increase shelf life to up to 12 months. Under frozen storage conditions (-20°C) shelf life of up to 24 months can be achieved. Note that the oil will require to be thawed and well mixed prior to use after storage. As the oil is temperature sensitive avoid temperatures exceeding 60°C during the thawing process.

Any unused material must be blanketed with nitrogen to prevent oxidation.

# Why choose Omega 3 DHA and EPA from algae?

**NON-TOXIC**  
**100%**  
**SUSTAINABLE**  
**ALGAL**  
**DHA & EPA**



**NO HEAVY**  
**METALS OR**  
**CONTAMINANTS**

**LOWER**  
**CARBON**  
**FOOTPRINT**

- ▶ **No boat required:** our algal omega 3 is grown on land and doesn't interfere with the natural ecology of the oceans.
- ▶ **It's Environmentally Friendly:** we grow our algal oils away from the sea in food grade facilities - it doesn't impact on the world's diminishing fish stocks. We aim to increase the consumption of omega 3 from algal sources and decrease the need for fish oil omega 3, after all, it's chemically identical to fish oil OM3.
- ▶ **Utilising waste to energy: manufactured using purified water in food grade facilities: no contaminants** such as heavy metals, nanoplastics, toxins or other harmful components often found in fish oil omega 3.
- ▶ **Lower carbon footprint:** we have reduced our carbon footprint by as much as 50% compared with catching wild fish, which requires trawlers, harvesting, processing then shipping across the world, we have a much smaller supply and logistics chain.
- ▶ **Non-GMO**
- ▶ **Gluten Free**
- ▶ **Organic extraction methods**

We are committed to the development of **innovative, planet friendly** products that reduce our carbon impact, we are constantly striving to **improve our manufacturing process** and our **logistics chain**, we also use **waste to energy**. We are on a mission to be **carbon neutral** within the next 10 years.

We hope that in time, we will make a **major contribution to address the world's diminishing fish stocks** and help increase the consumption of essential fatty acids from non-fish sources.

Get in touch:  
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