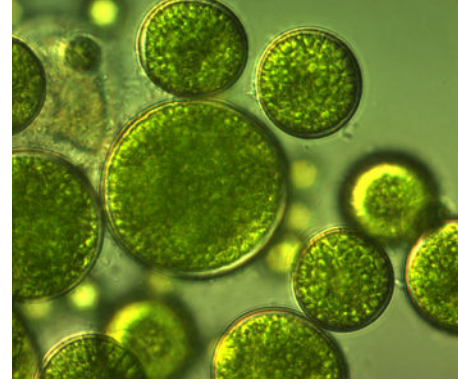


PASSPORT



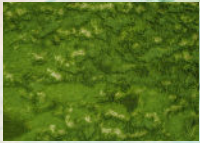
20852

AcquaSeal® Algae



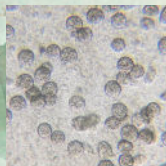
Start:

Chlamydomonas reinhardtii is sourced from Massachusetts, USA.



Final stop:

A sustainable, oil-soluble active: AcquaSeal® Algae



Chlamydomonas reinhardtii is grown in cell culture at our North Carolina, USA site, followed by isolation of chloroplasts and thermal fractionation to isolate chloroplast lipids.

Road Map Tour

Algal lipid fractions derived from the green algae, *Chlamydomonas reinhardtii*

As sustainability concerns increase, we look to develop ingredients which promote biodiversity and environmental protection. As a result of thriving in such diverse and extreme environments, green algae, such as *Chlamydomonas reinhardtii*, produces an array of unique bioactive complex lipids and fatty acids. After originally sourcing *Chlamydomonas reinhardtii* algal cells from Massachusetts, USA, Active Concepts continues to grow these algal cells in cell culture.

Chlamydomonas reinhardtii cell culture offers the opportunity to grow algal cells under controlled conditions. These methods supply a sustainable source of *Chlamydomonas reinhardtii* cells without the influence of seasonal harvest, variations in quality, and disruption to the environment for sourcing. The biotechnology of growing algal cells in cell culture can also limit a negative impact on the environment, using less resources (such as water and energy), and reducing transportation and CO₂ outputs while providing the means to create consistent active ingredients.

We want to be transparent in our supply chain from harvest to production. It's important to know where our raw materials come from and where they are going.

Safety & Toxicology

Non-phototoxic

Non-irritant to skin

Non-sensitizing

Non-irritant to eyes

Non-harmful to aquatic life

Regulatory

INCI: *Chlamydomonas Reinhardtii* Extract

CAS: N/A

EUROPE: Compliant

USA: Compliant

JAPAN: Compliant

CHINA: Compliant



Specification

ORIGIN: Botanical

PRESERVATIVES: None

APPEARANCE: Semi-Solid Wax, Off-White to Yellow

SOLVENTS: None

USE LEVEL: 1.0 - 10.0%

Environmental Impact

Active Concepts Production

0.336 kg CO₂e per kg

0.774 kW energy per kg

86.6% Biodegradable after 28 days

2.96 litres water per kg

0.481 kg compost per kg

Animal Welfare

Never tested on animals and made from non-animal-derived ingredients. Neither we or our supply chain have allowed contact with any animal products, animal by-products, or derivatives.



Ethical Trade

Cell culture offers the opportunity to grow numerous plants, creating a sustainable source of material with limited disruption to the environment.



Community Welfare

The sustainable sourcing of materials for growth in cell culture helps to meet current needs of the community while safeguarding the same resources to be available for use by future generations.



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