

Technical Data Sheet



PRODUCT NAME:	MAGOMEGA™1545 Algae
PRODUCT DESCRIPTION:	Eicosapentaenoic & Docosahexaenoic Acid Concentrate (Omega-3 monoglyceride and diglyceride fatty acids)
REFERENCE:	22430
OBSERVATIONS:	Product stabilized with Mixed Natural Tocopherols (Max. 4 mg/g)
SHELF LIFE/RETEST PERIOD:	24 months (stored in the original, unopened, sealed drum)

General Information

Odor:	Deodorized through our patented Cleantex® Technology for excellent organoleptic properties
Other:	Cloudy Liquid Non-GMO IFOS Compliant

Determinations

Fatty Acid Profile

EPA mg/g (as TG)	Min. 150	Eur. Ph. 2.4.29
DHA mg/g (as TG)	Min. 450	Eur. Ph. 2.4.29
Monoglyceride content (%A)	Min. 25	Eur. Ph. 2.4.30
Monoglyceride + Diglyceride + Triglyceride content (%A)	Report	Eur. Ph. 2.2.30
Free Glycerin (%w/w)	Max. 1.5	USP Mono- and Di- glycerides

Analytical Data

Acid Value (mg KOH/g)	Max. 4	Eur. Ph. 2.5.1
Peroxide Index (meq O ₂ /kg)	Max. 5 (at time of release)	Eur. Ph. 2.5.5
Anisidine value	Max. 20 (at time of release)	Eur. Ph. 2.5.36
Totox value	Max. 26	(2 x PI) + AI
Color	Max. 8	Gardner
Moisture and volatiles (%w)	Max. 0.05	AOCS Ca 2c-25
Unsaponifiable matter (%w)	Max. 3.5	AOAC 994.10
Trans Fatty acids (%)	Max. 1	AOCS Cd 14c-94

Contaminant Data

Arsenic (mg/kg)	Max. 0.1	AOAC 986.15
Cadmium (mg/kg)	Max. 0.1	AOCS Ca18d-01
Lead (mg/kg)	Max. 0.05	AOCS Ca18c-91
Mercury (mg/kg)	Max. 0.1	AOAC 971.21
Dioxins & Furans (pg WHO-TEQ/g)	Max. 1	HRMS/GC-MS/MS
Dioxin- Like PCBs (pg WHO-TEQ/g)	Max. 1.5	HRMS/GC-MS/MS
Sum Dioxin & Furans + Dioxin-like PCBs (pg WHO-TEQ/g)	Max. 2.5	HRMS/GC-MS/MS
PCBs (209 Congeners) (mg/kg)	Max. 0.045	EPA 8082

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TDS 22430

Revision Date:
20-Nov-2023

Rev. 1

QA Manager:
Raquel Yeregui



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Storage

Store at temperatures < 30°C / 86°F. Preferable between 15°C/59°F and 25°C/77°F.

Shelf life can be guaranteed if the oil is stored in the original unopened sealed drum, protected from light and heat.

If the product needs to be manipulated over a period of time, it should be preserved each time in an inert atmosphere with the use of nitrogen or argon.

This product is contained in a pre-sealed drum under nitrogen gas. If the seal is broken upon inspection, please contact the manufacturer.

Standard Packaging Size: 190 Kg

Certifications / Compliance



EU Regulation 2023/915 on maximum levels for certain contaminants in food

Solutex is registered with the General Health Registry of Food Companies in compliance with Spanish regulations: 26.013729/Z, 16.03705/Z, 31.002476/Z

Aenor certification for Quality & Safety compliance: SA-0052/2010 UNE-EN-ISO 22000: 2018; ER-1375/2010 UNE-EN-ISO 9001: 2015

USFDA Registration #13660600156 including cGMP Compliance

Technology

Solutex's manufacturing operation includes patented technologies to gently extract and purify polyunsaturated fatty acids obtained from algae and fish oils. Solutex has a rigorous process for qualifying the best starting material in combination with patented purification methods which enables us to produce biolipids in higher concentrations.



Flutex combines innovative green chemistry technologies to extract, purify, separate and concentrate the individual fatty acids of omega-3 oil. This green chemistry method of fatty acid purification improves the quality of the oil compared to other chemical concentration procedures which create isomers and other contaminants.



Cleantex is an innovative, gentle purification process that utilizes nitrogen rather than steam, reducing the risk of oxidation. The combination of nitrogen and filtering sands under supercritical conditions allows us to purify and deodorize oil without exposing the Omega-3 Fatty Acids to harmful conditions.



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Solutex Patent Rights

Solutex GC, SL is the licensee of two family patents, PCT/CA2008/000301 and PCT/CA2008/000530 from the Canadian company SFC Pharma, which are currently enforced in: USA, Canada, Spain, Germany, France, United Kingdom, Ireland, Belgium, Switzerland, Norway, and Australia, wherein Solutex GC has the following exclusive rights:

- Manufacture and sale of medical foods containing EPA monoglyceride (MAG), DHA MAG, and/or DPAn-3 MAG regardless of the origin of the oil (fish oil, algae oil, etc.), for any application and health condition, in the medical food market.
- Manufacture and sale of dietary supplements containing, EPA MAG, DHA MAG, and/or DPAn-3 MAG, provided that the origin of the oil is algae oil, and that the products may not be produced for the treatment, prevention or management of triglycerides and cholesterol in a subject.



Sourced from **algae** – one of our planet’s most sustainable and renewable sources of omega-3 – MaGOmega® is a **patented, vegan Monoglyceride (MAG) form of omega-3**, utilizing innovative enzymatic transesterification technology.

The unique composition of **MaGOmega promotes bioavailability** allowing auto-emulsification to facilitate absorption of EPA & DHA.



DIRECT ABSORPTION into the DIGESTIVE TRACT promotes bioavailability

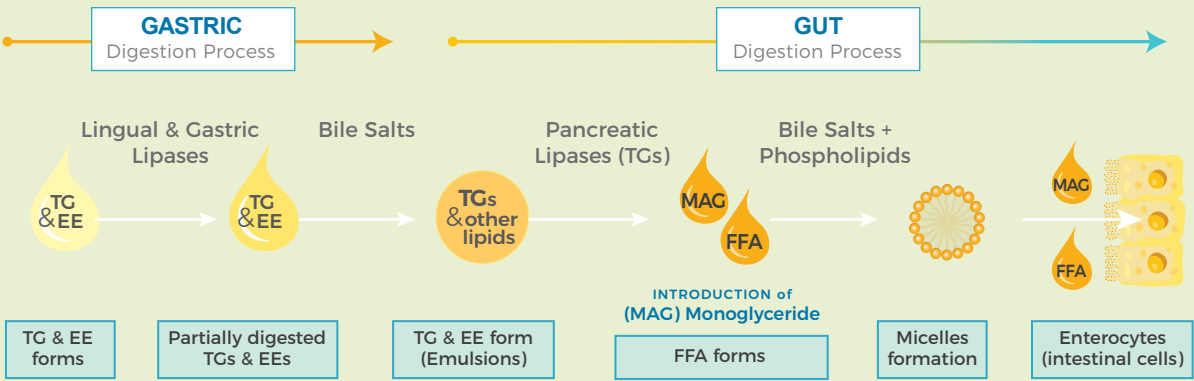


Small but mighty: all the benefits of omega-3 in a lower dosage

MaGOmega is unique and IP protected

- *Schizochytrium* sp, micro-algae sourced from Europe
- Fermented in America & Europe, concentrated in Spain
- Vegan Omega-3 DHA
- No environmental contaminants
- Shelf-life: 24 months
- Non-GMO
- Kosher certification

The process of DIGESTION and ABSORPTION in the body



MaGOmega = EPA & DHA in Monoglyceride form – a “pre-digested” form ready for absorption – into intestinal cells

MaGOmega® is designed to take advantage of the natural lipid absorption capacity of the human body which favors monoglycerides and free fatty acids, creating beneficial enzymatic conditions in the intestine.

This enhances the absorption of EPA and DHA, compared to triglycerides (TG), and ethyl esters (EE) making it ideal for people with issues related to digestion, and impaired lipid absorption due to health challenges.

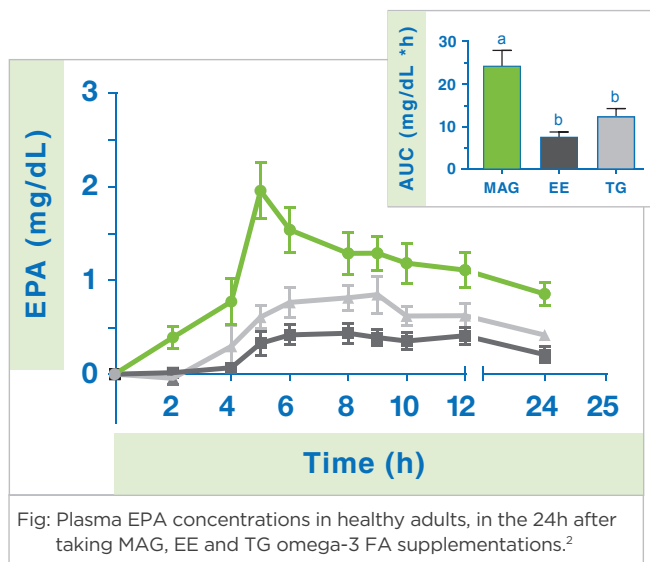
Patented in USA (US8,119,690; US8,198,324); Canada (CA2672513; CA2677670); Australia (AU2008215077); and Europe (EP2121576B1).

Omega-3s in Monoglyceride form for greater bioavailability and faster absorption

Monoglyceride (MAG) is shown to demonstrate greater bioavailability in our bodies than triglycerides (TG) and ethyl esters (EE)²⁻³.

All the benefits of omega-3 in a lower dosage.

EE and TG forms are first broken down into smaller components by lipases in the digestion process before absorption into the mucosal walls of the digestive track. Monoacylglycerol forms are initially a “predigested” readily absorbed form, achieving the same omega-3 benefits in a lower dosage.



ATTRIBUTES

- More readily bioavailable, highly efficient in lower dosages due to better absorption and utilization by the body
- Beneficial for greater nutrient absorption

MARKET EXCLUSIVE

- Unique & IP protected
- Vegan Monoglyceride form (*Schizochytrium* sp micro-algae)
- Highest concentrations available

PRODUCT CHARACTERISTICS

- Clinically proven¹
- No environmental contaminants
- Shelf life: 24 months
- Non-GMO

EPA mg/g DHA mg/g

Algae

MaGOmega	0053	480
MaGOmega	0065	600

*Expressed as TG

Fish

MaGOmega	6000	550
MaGOmega	0070	650
MaGOmega	4030	250
MaGOmega	4535	300
MaGOmega	5020	150

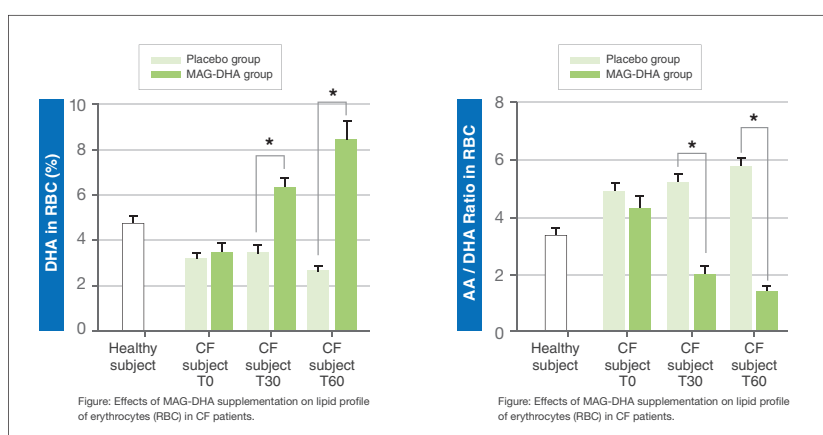
*Expressed as TG

MaGOmega is a great solution for those who suffer from digestive issues and impaired lipid absorption due to health challenges.

A pilot study conducted in cystic fibrosis (CF) patients¹, a health condition that leads to fat malabsorption and malnutrition, demonstrated that the medical food MAG-DHA (MaGOmega) represents a simple solution to overcome the impaired absorption of DHA of CF patients:

1. Increased DHA levels in blood and improved AA/DHA imbalance

Our results show a 1.9-fold increase of the DHA erythrocyte level and a 2.1-fold decrease of the AA/DHA ratio after only 1 month of MAG-DHA supplementation while a previous clinical study⁴ on CF patients using a triglyceride form showed a 1.6-fold increase of the DHA erythrocyte level and a 1.2-fold decrease of the AA/DHA ratio after 3 months of supplementation.



MAG - DHA
greater bioavailability
after 1 month consumption
compared to TG - DHA
consumption
over 3 months

2. Improved pro-inflammatory parameters

Only 60 days of MAG-DHA supplementation is required for initiating anti-inflammatory properties through the reduction of pHLE complexes and IL-6.*

Down-regulation of pro-inflammatory mediator's production may improve clinical outcomes in CF patients.

3. Excellent tolerance in patients

The supplementation was well tolerated by CF patients and no side effects were detected.

*HLE: Human Leukocyte Elastase is a toxic neutrophil product which produces deleterious effects in the CF lung.

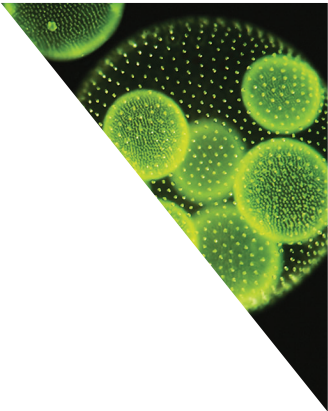
*IL-6: Pro-inflammatory cytokines

1. Mar. Drugs 2018, 16, 184; doi:10.3390/md16060184

2. J Nutr 2021;00:1-8. doi:10.1093/jn/nxaa458.

3. Eur J Clin Nutr 75, 680-688 (2021). doi:10.1038/s41430-020-00767-4

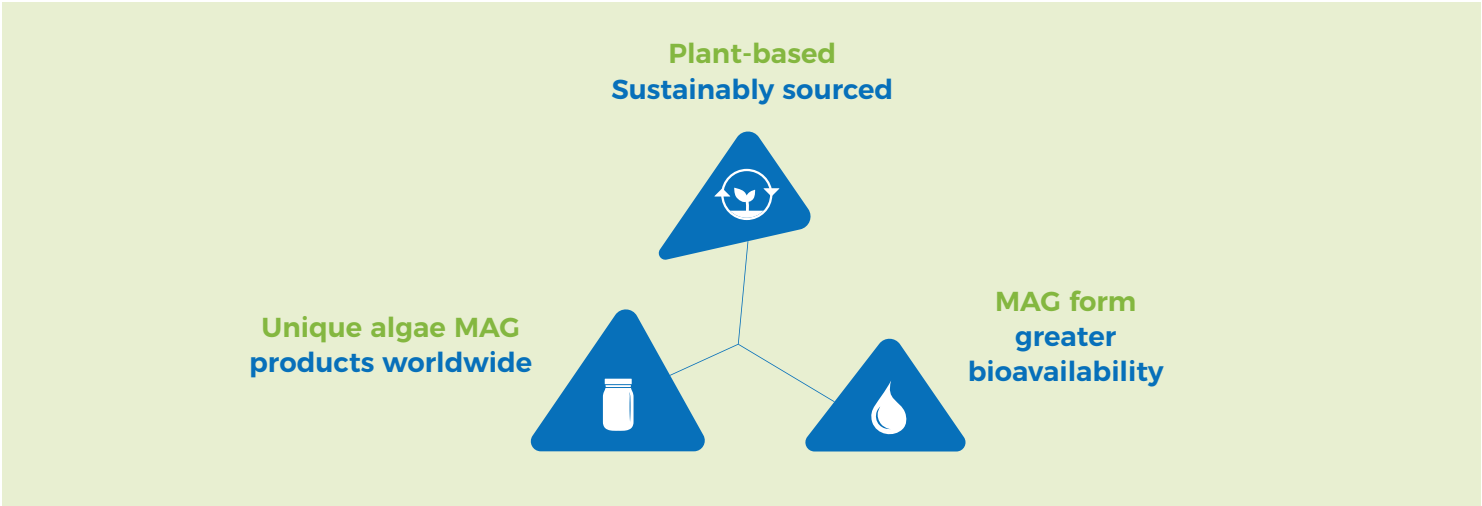
4. Prostaglandins Leukot Essent Fatty Acids. 2016 May;108:45-50. doi:10.1016/j.plefa.2016.03.014.



Sustainable Advanced Nutrition

MARKET EXCLUSIVE – Unique Microalgae MAG product worldwide

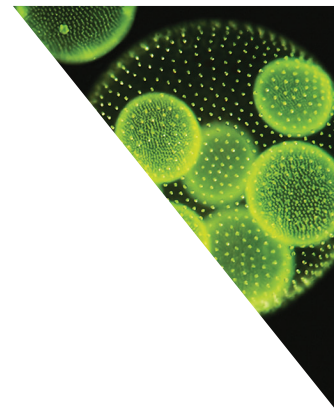
MaGOmega® is a sustainable, revolutionary omega-3 ingredient, harnessing the power of biolipid technology to create an algae-sourced vegan concentrate with enhanced absorption.



INTRODUCING MaGOmega® 15/45 our latest vegan EPA+DHA concentrate in MAG form

Vegan		EPA mg/g	DHA mg/g
EPA & DHA	MaGOmega DHA 70		700
	MaGOmega DHA 60		600
	NEW MaGOmega 15/45	150	450

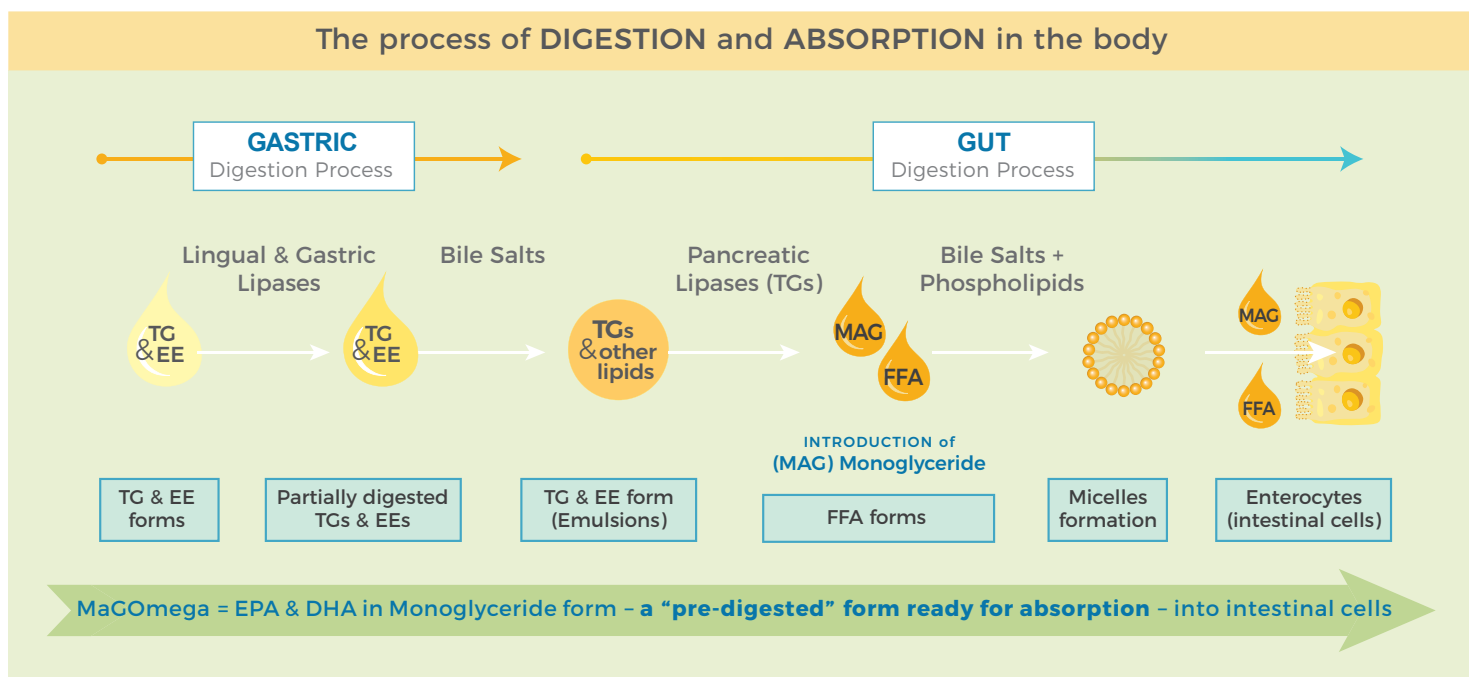
- ✓ Schizochytrium sp, micro-algae
- ✓ Sourced in America & Europe
- ✓ Shelf Life: 24 months
- ✓ Non-GMO Vegan
- ✓ No environmental contaminants



SMALL BUT MIGHTY

Monoglyceride EPA/DHA enhances bioavailability by promoting absorption in addition to simplifying the fat absorption processes in the intestine.

MaGOmega® is designed to take advantage of the natural lipid absorption capacity of the human body which favors monoglycerides and free fatty acids, creating beneficial enzymatic conditions in the intestine.



This enhances the absorption of EPA and DHA, compared to triglycerides (TG), and ethyl esters (EE) making it ideal for people with issues related to digestion, and impaired lipid absorption due to health challenges.

Experience the next generation of sustainable, premium omega-3 products with MaGOmega®

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