

Product Bulletin

Marinol® C-38 is concentrated natural fish oil with a high content of the omega-3 fatty acids Eicosapentaenoic Acid (EPA) and Docosahexaenoic Acid (DHA) in glyceride form. Concentration is done by means of a gentle enzymatic process and molecular distillation.

Applications

- ✓ Dietary supplements
- ✓ Dairy products, e.g. (flavored) milk, yogurt and yogurt drinks
- ✓ Meal replacement shakes
- ✓ Nutritional products
- ✓ Beverages, juices
- ✓ Fats and oils, dressings, spreads

Typical Properties

| | | | |
|---------------------------------------|--------|-------------------------|------|
| Appearance at 25°C | liquid | EPA (C20:5), %* | 23.5 |
| Free Fatty Acid (% as Oleic) | 0.2 | mg/g** | 210 |
| Peroxide Value, meq/kg | 1.0 | DHA (C22:6), %* | 16.5 |
| Anisidine Value | 5 | mg/g** | 150 |
| TOTOX value | 7 | EPA+DHA, %* | 40 |
| Moisture, % | 0.02 | mg/g** | 360 |
| Lovibond color, yellow, 1" cell | 10 | Total Omega-3, %* | 52 |
| Lovibond color, red, 1" cell | 2 | mg/g** | 480 |

* Values given in % are relative peak area in chromatogram

** Values given in mg/g are absolute amount of free fatty acid per g of glyceride oil

Nutrition Information (per 100 grams)

| | | | |
|-------------------------------|-----|-----------------------------|------|
| Calories from Fat, kcal | 891 | EPA (C20:5), g | 23.5 |
| Total Fat, g | 99 | DHA (C22:6), g | 16.5 |
| Saturated Fat, g | 19 | Protein, g | 0 |
| Monounsaturated Fat, g | 14 | Total Carbohydrate, g | 0 |
| Polyunsaturated Fat, g | 66 | Cholesterol, g | 1 |

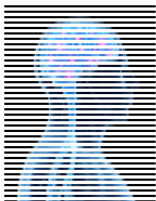
Antioxidants

Mixed Natural Tocopherols, mg/g 3

Concentration of mixed natural tocopherols may decrease over time during storage, due to antioxidant activity.

Ingredients

Concentrated fish oil, Antioxidant (mixed natural tocopherols)





Packaging

Marinol C-38 is packaged under nitrogen and is available in steel drums of 190 kg net or 15.85 kg jug-in-box.

Statements

Marinol C-38 is

- ✓ Food Grade.
- ✓ Produced following the principles of Food Safety Standards.
- ✓ Fully traceable from finished products to raw materials and vice versa.
- ✓ Non-GMO (Genetically Modified Organism). Not based on genetically modified raw materials and does not need to be labeled under GM labeling rules.
- ✓ Allergens: Fish (refined fish oil concentrate)
- ✓ Free from any irradiated or ionized components and has not been ionized or irradiated.
- ✓ Not subjected to risk from Bovine Spongiform Encephalopathy (BSE) and Transmissible Spongiform Encephalopathy (TSE).
- ✓ Not mentioned in the World Anti-Doping Agency (WADA) prohibited substances list and is free from prohibited substances mentioned in the WADA list as of the publication date of this document.

Storage & Handling

Marinol C-38 is stable if stored in the unopened original packaging (under nitrogen) for at least 6 months from date of production at a temperature below 7°C (44°F), and for at least 24 months from date of production at a temperature of -18°C (-0.4°F). The product should be stored away from strong odors and direct sunlight. Before use, it may be necessary to carefully warm product at temperatures not to exceed 30°C under a controlled, inert atmosphere with careful mixing until clear (homogeneous).

Normal safety precautions should be employed when handling Marinol C-38.

The information contained herein is based on the manufacturer's own study and the works of others and is subject to change without prior notice. The information is not intended to be all-inclusive, including as to the manner and conditions of use, handling, storage or disposal or other factors that may involve additional legal, environmental, safety or performance considerations. Nothing contained herein grants or extends a license, express or implied, in connection with any patents issued or pending of the manufacturer or others, or shall be construed as a recommendation to infringe any patents or to violate any applicable laws. **STEPAN COMPANY MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR USE, AND NO WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE, INCLUDING REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY, ACCURACY, COMPLETENESS, ADEQUACY OR OTHERWISE.** Stepan Company (and its employees, subsidiaries and affiliates) shall not be liable (regardless of fault) to the vendee, its employees, or any other party in respect of this information, including in respect of its accuracy, completeness, adequacy, furnishing, use, or reliance upon, and the vendee assumes and releases Stepan Company (and its employees, subsidiaries and affiliates) from all liability, whether in tort, contract or otherwise.

MARINOL® is a registered trademark of Stepan Specialty Products, LLC.



Stepan Specialty Products, LLC
100 W. Hunter Avenue
Maywood, NJ 07607, U.S.A.
www.lipidnutrition.com

For Technical Service Call:

Stepan Company USA +1-800-745-7837

For Customer Service Call:

Stepan Company USA +1-800-457-7673
Stepan Lipid Nutrition B.V. +31 (0)75-727-1000

Email: food.health@stepan.com