Product Bulletin

**CLARINOL® POWDER** is a microencapsulated oil in free-flowing powder form with a high concentration of Conjugated Linoleic Acids (CLA), mainly in the form of triglycerides. The powder is comprised of Clarinol G-80 and contains approximately 60% conjugated linoleic acid. The two main isomers, which are the two major isomers found in nature, are cis-9, trans-11 (c9,t11) and trans-10, cis-12 (t10,c12) CLA, present in a 50:50 ratio.

**Applications**
- Bars and baked goods
- Sports nutritional
- Dietary supplements
- Meal replacement shake mixes

**Typical Properties**
- Appearance at 25°C: Off-white powder
- Oil, glyceride form, %: 80
- Moisture, %: 0.5
- Solubility in water (± 15°C): Dispersible
- CLA total, mg/g: 610
- CLA isomers (c9,t11+t10,c12), mg/g: 570

**Nutrition Information** (per 100 grams)
- Total Calories, kcal: 792
- Calories from Fat, kcal: 720
- Total Fat, g: 80
- Saturated Fat, g: 5
- Monounsaturated Fat, g: 9
- Trans Fat, g: 0.6
- Polyunsaturated Fat, g: 62
- Protein, g: 7.5
- Sugars, g: 10
- Total Carbohydrate, g: 10
- Sodium, mg: 200
- Sodium chloride, mg: 0.0
- Total CLA, g: 61
- c9t11 + t10c12 isomers: 57

**Antioxidants**
- Mixed Natural Tocopherols, mg/g: 3

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

**Ingredients**
Vegetable (safflower) oil rich in conjugated linoleic acid, glucose syrup, sodium caseinate, anti-caking agent (silicon dioxide E551), lecithin (E322), stabilizer (tetrasodium diphosphate E450iii), antioxidant (E306, extract of natural origin rich in tocopherols)

**Packaging**
Clarinol Powder is packaged under nitrogen in bags of 10 kg.
Clearances

Clarinol CLA isomers are FDA notified GRAS through scientific procedures by GRAS Notice 232.

The FDA agrees with the determination of Stepan Lipid Nutrition that Clarinol CLA isomers are GRAS for use in the following food categories: Soy Beverages, Meal Replacement Beverages, Meal Replacement Bars, Flavored Milk Products, Milk, Yogurt Products, and Fruit Juice Products.

Clarinol CLA isomers are considered GRAS at intake levels up to 3 g per person per day

For regulatory status in other countries, please contact Stepan Lipid Nutrition

Statements

Clarinol Powder 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: Milk, Soy. Contains lactose.
✓ 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

Clarinol Powder is stable for at least 2 years from date of production, if stored in the unopened original packaging (under nitrogen) in a cool, dry place (41-50°F / 5-10°C), away from strong odors and not in direct sunlight.

Normal safety precautions should be employed when handing Clarinol Powder.