

Plant Sterols

Advasterol ESTER IP

Product Code: 11020498

Version RJU

Description

ADVASTEROL ESTER IP is a light yellow and viscous paste, having a slight characteristic vegetable oil aroma. Obtained by esterification of Non GMO soybean sterols with fatty acids from rapeseed oil. ADVASTEROL ESTER IP contains not less than 97% of total plant sterols esters and free sterols.

Ingredients

- Natural phytosterol esters
- Natural phytosterols

Product Specifications

(Measured on each lot)

Total Sterol Ester content + Free Sterols (%)	Min. 97.0	Free Sterols (%)	Max. 3.0
Acid Value (mg KOH/g)	Max. 0.5	Humidity (%)	Max. 0.1
Peroxide Value (meq O ₂ /g)	Max. 1.0	Total Sterols content (%)	Min. 59.0

Other Characteristics

Additional descriptive data (Tests are run sporadically)

Viscosity @30°C (cP)	2400 - 2700	Specific gravity (25°C)	0.91 - 0.98
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Microbiology

Total plate count (CFU/g)	Max. 1000	Salmonella (/25g)	Absent
Yeast and moulds (CFU/g)	Max. 100	Escherichia coli (CFU/g)	Max. 10
Coliforms (CFU/g)	Max. 10	Staphylococcus aureus (CFU/g)	Max. 10

Contaminants

Aflatoxin B1 (µg/kg)	Max. 2.0	Pesticide Residues (mg/kg)	Meets regulations
Sum of Aflatoxins (B1, B2, G1, G2) (µg/kg)	Max. 4.0	Sum of dioxins (WHO-PCDD/F-TEQ) (pg/g)	Max. 0.75
Organic Volatile Impurities USP	Passes	Sum of dioxins and dioxin like PCBs	
Heavy Metals as Pb (mg/kg)	Max. 10	WHO-PCDD/F-PCB-TEQ) (pg/g)	Max. 1.25
Cadmium (mg/kg)	Max. 0.20	Sum of PCB28, PCB52, PCB101, PCB138,	
Arsenic (mg/kg)	Max. 0.10	PCB153 & PCB180 (ICES-6) (ng/g)	Max. 40.0
Lead (mg/kg)	Max. 0.10	Benzo(a)pyrene (µg/kg)	Max. 2.0
Mercury (mg/kg)	Max. 0.10	PAH4 (µg/kg)	Max. 10.0
Sulphated Ash (%)	Max. 0.1		

Use Information

Used as a natural LDL Cholesterol reducer in a wide variety of food preparations. Due to its emulsifying and stabilizing properties find application in cosmetics.

Suggested manner of use is identical and as specified in following EC decisions: 2004/333, 2004/334, 2004/335, 2004/336, 2004/845, 2006/58 & 2008/36. Suggested daily intake for lowering LDL Cholesterol is 3 gr sterols/day.

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Source and Manufacturing

ADVASTEROL ESTER IP is produced in a non-chemical, purely physical process under GMP, Codex Alimentarius conditions from IP certified soybean and rapeseed. FSSC 22000 certified. Our raw materials are sourced from certified Non GMO sources following the guidelines of our IP programs to avoid contamination with GMO materials during storage, transport and production. These principles safeguard the high quality of ADVASTEROL ESTER IP.

Additional Ingredient Statements

Product is BSE/TSE free, Ethanol free, and Residual Solvent free. It does not require labeling declaration as being potential allergen. It does not contain palm oil and it is not palm oil derived. No animal or animal derivatives are used. It complies with Nagoya protocol.

This product is PCR negative. The product is GMO-free according to certified Identity Preserved Non GMO Program.

Typical Chemical Composition

 β -Sitosterol Ester (%): 40 - 49

Campesterol Ester (%): 18 - 30

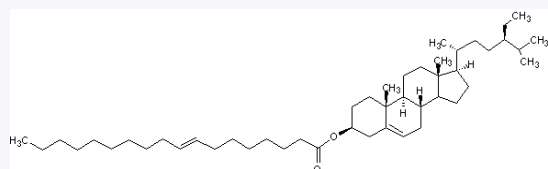
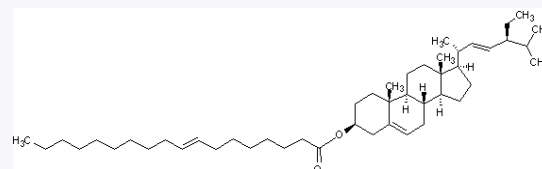
Stigmasterol Ester (%): 16 - 36

 β -Sitostanol Ester (%): 1 - 3

Campestanol Ester (%): 0.2 - 1

Brassicasterol Ester (%): 0.2 - 1

Other Sterol Ester (%): 0.8 - 2.9

 β -Sitosterol Oleate $C_{47}H_{82}O_2$ M.W.: 679Stigmasterol Oleate $C_{47}H_{80}O_2$ M.W.: 677

Solubility

Insoluble in water. Soluble in oil, fats, hexane, iso-octane and 2-propanol.

Packaging and Storage

Available in 18 kg plastic jerrycans or 190 kg metal drums.

ADVASTEROL ESTER IP shall be stored in sealed containers, at room temperature and dry conditions, given that the product is sensitive to light, oxygen, high temperatures or alkaline environment. Keep container tightly closed; once opened use content quickly.

For food and dietary supplement applications, product is best before 18 Months. For soft gel capsules or other applications where sensorial properties are not so important, product stored under temperatures below 25°C is best before 24 Months from manufacturing date in unopened package.

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Regulatory Information

The U.S. FDA has recognized Plant Sterols as safe (GRAS) GRN# 398 Vegetable oil and Tall Oil derived phytosterols and phytosterols ester formulations and are GRAS exempt for the requirement for pre-market approval (21 CFR, Part 170.36) for certain food categories.

Specifications according to EU regulations: EC 1881/2006, EC 629/2008, EC 835/2011, EC 1259/2011, EC 231/2012, EC 396/2005, EC 2073/2005.

Kosher and Halal certified.

Please ask for our Regulatory statement for further information on the global registration status of the product.

Nutritional Information

Calories (kcal/100g)	348	Sodium (mg/100g)	0.3
Total Carbohydrate (%)	0	Potassium (mg/100g)	0.5
Protein (%)	0	Calcium (mg/100g)	0
Total fat (%)	38.7	Lead (mg/100g)	0
Dietary Fiber (%)	0	Sugars / Added Sugars	0 / 0
Humidity (%)	0.1	Starch	0
Ashes (%)	0	Cholesterol (mg/100g)	0
<u>Fatty Acids</u>		Vitamin A	0
Saturated (%)	4.3	Vitamin C	0
Monounsaturated (%)	22.8	Vitamin D	0
Polyunsaturated (%)	11.6	Vitamin E (mg/100g)	0
Trans Fat (%)	0	Other, Phytosterols (%)	Min. 61

Overview

- Ingredients Natural Phytosterol Esters & Natural Phytosterols
- Appearance: light yellow and viscous paste with slight characteristic vegetable oil aroma
- Function: Cholesterol reducer
- Assay Min. 97% total sterol esters + free sterols
- Origin: Vegetable; soybean and rapeseed
- Use level: 3 gr sterols/ day as cholesterol reducer
- Regulatory Status Europe, US, Japan, China, Australia, Canada
- Certifications: FSSC 22000, Hard IP, Kosher, Halal
- Shelf life: 18 months (Food & Dietary supplements) / 24 months (Soft gels)

DISCLAIMER

This Product Data Sheet contains information based on our laboratory analysis. Advanced Organic Materials S.A. assumes no responsibility with regards to the suitability of the products for any specific purposes intended by the user. Recommendations for use and application of the product are given for information purposes. These suggestions do not release customers for conducting the necessary tests as suitability of the product is dependent on the characteristics of the intended process. The user of the product is solely re-sponsible for compliance with all laws and regulations applied to the use of the product, including intellectual property rights of third parties.

The information represent typical values, analytical methods are available at customers request.