

## TECHNICAL DATA SHEET

Effective date: 07.2025

### RETINAL ULTIMATE

#### INFORMATION ON SUBSTANCE / MIXTURE

INCI	Glycerin, Retinal, Xanthophylls
Origin	Glycerin: Organic, vegetal (rape seed) Retinal: from Halobacterium salinarum, non-GMO, Fermentation, aqueous extract Xanthophylls: from Halobacterium salinarum, non-GMO, Fermentation, aqueous extract
ISO 16128	Conforms as natural ingredient with a natural (Index of 1)
Raw material category	Active ingredient for cosmetics, personal care

#### TECHNICAL DATA

##### Physical and chemical parameters

Appearance	Viscous liquid, slightly yellow, clear transparent
Color	Color might change during storage but stability is not affected
Odor	Characteristic
Retinal concentration	contains 1.2 -2.0 ppm natural Retinal
Solubility	Partially in water / partially in oil
Composition	95% glycerin 4% retinal extract 1% xanthophylls

##### Biological parameters

Total plate count	Max. 100 cfu/g
Yeasts and Molds	Max. 100 cfu/g
Escherichia coli	Absent /g
Staphylococcus aureus	Absent /g
Salmonella	Absent /g

#### TRANSPORT, STORAGE and SHELF LIFE

Storage conditions	Store in a cool and dry place, protected from light in tightly closed original container
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Shelf Life	Min 24 months under good storage conditions
Transport	-

#### LEGISLATION

CAS No	GLYCERIN: 56-81-5 XANTHOPHYLLS: 127-40-2
Regulatory Status	Product complies with Regulation (EU) No. 1223/2009 as amended, under typical conditions of use.
GMO status	The process uses a non-genetically modified microorganism to directly and efficiently convert renewable, non-GMO derived yeast extract to synthesize natural Retinal via fermentation. After the fermentation step, an osmotic shock with water is applied to achieve 100% inactivation by complete disruption of cells (no viable organisms). The inactivated cell debris are then completely separated and removed from the product stream. The product stream is then processed through multiple separation and purification steps, producing a high-purity finished product (>98.7%), free of the microorganisms. Disposal of the cell debris is completed in an on-site closed-system waste treatment process.
Nanomaterial statement	The product and/or its components is not considered to be a nanomaterial meaning an insoluble or biopersistent and intentionally manufactured material with one or more external dimensions, or an internal structure, on the scale from 1 to 100 nm, as defined in Regulation (EC) No 1223/2009 on cosmetic products.
Allergens	Does not contain any of the 56 substances listed in Annex III of cosmetic regulation (EC) 1223/ 2009 and identified by the SCCNFP as likely to cause allergenic reactions
Volatile Organic Compounds (VOC)	Does not contain any ingredient that, according to the information provided by our suppliers, falls under the definition of Volatile Organic Compound (VOC) as described in Directive 2004/42/CE
Ethanol	Does not contain as ingredient
Gluten- Status	Does not contain gluten
Animal testing	For the purposes of the European Cosmetics Regulation (EC) No. 1223/2009, no animal testing has been carried out by or on behalf of the manufacturer on the product/ingredients after 11th March 2009.
SVHC	Any substance appearing on the candidate list for authorisation and which is contained to more than 0.1 % in the product will be described in Section 3.2 of the updated version of the Safety Data Sheet. As new substances appear on the candidate list updates, the changes will be evaluated and may trigger an update of relevant Safety Data Sheets.

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Information for Vegan Assessment	Vegan and Vegetarian suitable. Manufacture does not involve the use of any animal product, by-product or ingredient. This product meets Vegan requirements, but it is not certified.
CMR substances	Does not contain any substance classified as CMR (Carcinogenicity, Germ Cell Mutagenicity and Reproductive Toxicity) from classes 1A, 1B or 2 in accordance with CLP Regulation 1272/2008 and its subsequent amendments

**DISCLAIMER**

All warranty claims in respect to the conformity of our product are subject to our General Terms and Conditions of Sale and Delivery. The data listed above reflects the results of the manufacturer or our supplier quality tests. We do not hereby make any express or implied warranty, whether for specific properties or for fitness for any particular application or purpose. All values are valid for the product when dispatched from the works. We recommend you perform your own quality and or identification checks on receipt.