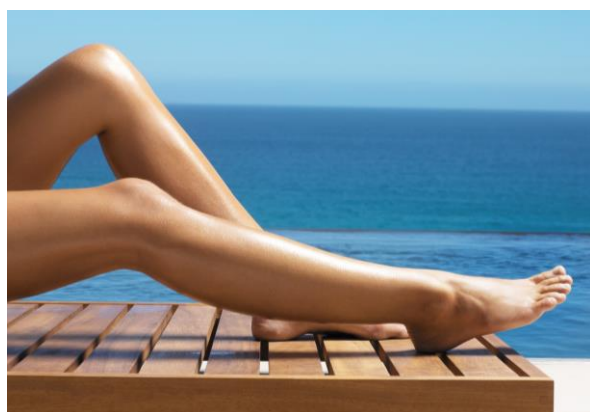


COLLAGEN HM

HYDROLYSED MARINE COLLAGEN

*Joint well-being
Skin anti-ageing*

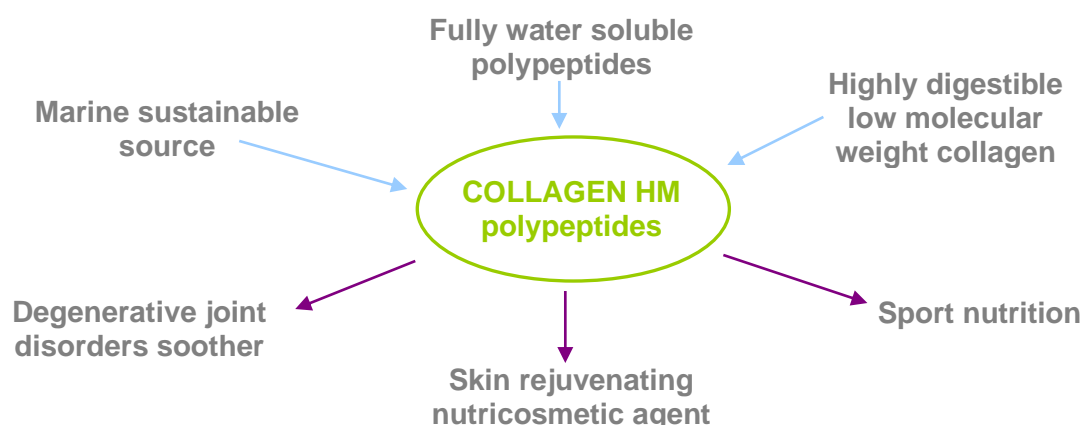


COLLAGEN HM is a purified hydrolysed marine collagen. It is extracted from selected wild fish skins by enzymatic hydrolysis.

COLLAGEN HM polypeptides mean molecular weight is around 2000 Da, making it soluble in aqueous phase and fully digestible.

COLLAGEN HM is recommended for food supplements to promote cartilage, bones and *skin regeneration*.

• COLLAGEN HM PALETTE OF ACTION







• COLLAGEN HM MAJOR ROLE IN JOINT HEALTH PROMOTION

COLLAGEN HM is a natural marine bioactive with proven efficacy. Taken together with preclinical studies which suggest that collagen hydrolysate through oral administration reaches joints and stimulates joint tissues, numerous clinical trials provide data supporting the positive effect of COLLAGEN HM on joint health:

- **reduction in pain**
- **significant decreased dependency on pain medications**
- **improvement in leg strength and joint mobility**

At-risk populations include older individuals, especially those over the age of 50; individuals who are overweight; individuals whose occupational activities predispose them to joint degradation, including athletes and those involved in mechanical stress on cartilage.

	Caio Matias Quality Assistant 	Emmanuel Boucher, Production Manager 	Arnaud Terninck Development Manager 
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- TECHNICAL INFORMATION -

- SPECIFICATIONS** (guaranteed for each batch)

	Specification	Test method
Appearance	fine white powder	Internal
Proteins (Kjeldahl)	≥ 90% <i>on crude product</i>	NF V 04-407
Moisture	≤ 10% <i>on crude product</i>	NF V 04-401
Ash	≤ 3% <i>on crude product</i>	NF V 04-404
Bulk density	0.35 – 0.50	Internal
Tapped density	0.45 – 0.60	Internal
TVN	≤ 250mg/100g	AOAC 920-03
pH (sol. 10%)	5.0 – 7.0	Internal

- Standard amino acid distribution (g/100g)**

Regularly checked according to a periodic control plan

Glycine	24.8	Isoleucine	1.43
Proline	10.5	Leucine	2.53
Hydroxyproline	6.51	Tyrosine	0.62
Glutamic acid	10.00	Phenylalanine	1.80
Thréonine	2.80	Lysine	3.85
Aspartic acid	6.43	Histidine	1.15
Alanine	8.81	Arginine	7.93
Valine	2.00	Serine	6.20
Methionine	2.05		
Cysteine + cysteine	0.07		

- PARTICLE SIZE DISTRIBUTION**

50% < 63µm (230 mesh)
85% < 125µm (120 mesh)

- SOLUBILITY** soluble in water

- ENERGY VALUE** 363 kcal/100g

- STORAGE**





Packaging 20kg / 705.479 oz bag in box

Shelf life 4 years

Store in a dry area and keep away from light.

Make sure the bag is closed air-tightly once it has been opened.

Don't keep the solubilized product over 65°C or under 4°C more than 24 hours without any stabilizing agent.

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- REGULATION DATA - *the data below have value of certificate*

• COMPOSITION

Compound	Source	CAS #	EC #
Collagens, hydrolyzates	**Fishing area: FAO 27 & 67	92113-31-0	295-635-5

Contains **fish**

*Main fish species: Cod (*Gadus morhua*), Alaska pollock (*Theraga chalcogramma*), Saithe (*Pollachius virens*), Haddock (*Melanogrammus aeglefinus*) and Plaice (*Pleuronectes platessa*)

• LEGAL STATUS

Food grade product intended to be used in food products and food supplements.

Produced in accordance with Regulation (EC) No 852/2004 and No 853/2004 on the hygiene of foodstuffs, with sanitary approval number FR 62 667 125 CEE.

• BSE/TSE

Is based on fish raw material only and cannot be affected by BSE/TSE.

Is not manufactured with any BSE-related risk material from bovine, ovine or caprine species, as defined in Decision 2000/418/EEC and Regulation 999/2001 and its amendments.

• GMO According to European regulations n°1829/2003 and 1830/2003

Is free from ingredients, additives, processing aids made of or derived from GMO.

• RESTRICTED SUBSTANCES

Does not contain any of the CMR substances as defined in Regulation (EC) No 1907/2006 and Regulation (EC) No 1223/2009 (article 15).

Does not contain any other SVHC (PBTs and vPvBs) in accordance with Regulation (EC) No 1907/2006.

Does not fall into the scope of Regulation (EC) No 1272/2008.

• PESTICIDES

Does not contain pesticides in accordance with Regulation (EC) No 396/2005.

MRIs (maximum residue levels of pesticides) are not applicable to fish products.

• HAZARDOUS SUBSTANCES Regularly checked according to a periodic control plan





Complies with Regulation (EC) No 1881/2006 & 853/2004 and its amendments

	Specification	Test method
Lead	Max. 5 ppm	mineralization + ICP-MS
Cadmium	Max. 0.5 ppm	mineralization + ICP-MS
Mercury	Max. 0.15 ppm	mineralization + ICP-MS
Chromium	Max. 10 ppm	ICP-OES = ICP optical emission spectrometry
Copper	Max. 30 ppm	ICP-OES
Zinc	Max. 50 ppm	ICP-OES
Sulphur dioxide	Max. 50 ppm	NF EN 1988-1
Oxygenated water	Max. 10 ppm	

SAS COPALIS Industrie

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Dioxins	Max. 3.5 pg/g (on fresh fish)	High resolution GC/MS
Sum of dioxins and dioxin-like PCBs	Max. 6.5 pg/g (on fresh fish)	High resolution GC/MS Ma
Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180	Max. 75 ng/g	

Arsenic	Max. 1ppm	mineralization + ICP-MS
Melamine	Max. 2.5 ppm	

- MICROBIOLOGICAL DATA** *Guaranteed for each batch*

	Specification	Test method
Total plate count	Max. 10,000 CFU/g	NF ISO 4833 (2003)
Enterobacteriaceae	Max. 10 CFU/g	NF V08-054
Staphylococcus aureus	Absent / 1g	European Pharmacopoeia
E.coli	Absent / 1g	European Pharmacopoeia
Yeasts and moulds	Max. 100 CFU/g	NF V08-059
Salmonella	Not detected / 25g	NF EN ISO 6579

- IRRADIATION** *complies with Regulations (EC) n° 1999/2 and 1999/3*

Is not irradiated.

Is free from ingredients, additives, processing aids made with the help of irradiation system or exposed to atomic radiation.





- SOLVENT** *complies with consolidated version of European Directive 2009/32*

Is free from processing made with the help of solvent apart from water.

Is free from VOCs (volatile organic compounds) in accordance with Regulation (EC) No 1999/13 on the limitation of emissions of volatile organic compounds due to the use of organic solvents.

- NUTRITIONAL INFORMATION (per 100g of product)**

Calories	370 Kcal
Total Fat	< 0.5 g
Saturated Fat	< 0.01 g
Trans Fat	< 0.01 g
Cholesterol	1.13 mg
Sodium	90 mg
Total Carbohydrate	< 0.5 g
Dietary Fiber	< 0.5 g
Total Sugar	< 0.2 g
Protein	> 90 g
Vitamin D	< 0.25 mg
Calcium	23.5 mg
Iron	0.293 mg
Potassium	1.44 mg

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- **ALLERGENS** Complies with Regulations (EC) n° 1169/2011, Annex II

Main allergens	Presence in the product	Cross-contamination
<i>Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre in terms of the total SO₂</i>	NO	NO
<i>Peanut and products thereof</i>	NO	NO
<i>Nuts, namely: almonds, hazelnuts, walnuts, cashews, pecan nuts, Brazil nuts, pistachio nut, macadamia or Queensland nuts, and products thereof</i>	NO	NO
<i>Eggs and products thereof</i>	NO	NO
<i>Fish and products thereof</i>	FISH 100%	YES
<i>Molluscs and products thereof</i>	NO	YES
<i>Crustaceans and products thereof</i>	NO	YES
<i>Soybeans and products thereof</i>	NO	NO
<i>Cereals containing gluten, namely: wheat, rye, barley, oats, spelt, kamut or their hybridised strains, and products thereof</i>	NO	NO
<i>Milk and products thereof (including lactose)</i>	NO	NO
<i>Sesame seed and derived products</i>	NO	NO
<i>Lupin and products thereof</i>	NO	NO
<i>Celery and products thereof</i>	NO	NO
<i>Mustard and products thereof</i>	NO	NO