

COLLAGEN HM

Hydrolysed Marine Collagen

Joint Well-being Skin anti-ageing

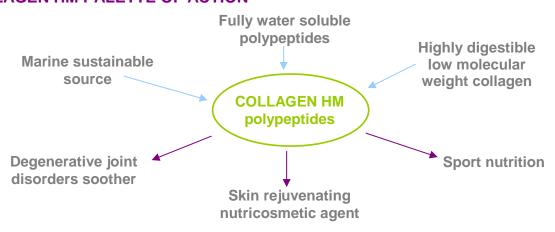


COLLAGEN HM is a purified hydrolysed marine collagen. It is extracted from selected fish skins by enzymatic hydrolysis.

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.





Emmanuel Boucher, Production Manager



Luce Sergent, Innovation & Marketing Manager



- TECHNICAL INFORMATION -

• SPECIFICATIONS (guaranteed for each batch)

Specification Test method Appearance fine creamy powder Internal **Proteins** > 90% on crude product NF V 04-407 < 10% on dry matter Moisture NF V 04-401 **Ashes** < 7% on crude product NF V 04-404 **Bulk density** 0.35 - 0.50Internal Tapped density 0.45 - 0.60Internal **TVN** ≤ 250mg/100g Internal pH (sol. 10%) 5.5 - 7.5Internal

• Standard amino acid distribution (% on total amino acids) Regularly checked according to a periodic control plan

Glycine	19.81	Isoleucine	1.06
Proline	11.71	Leucine	2.51
Hydroxyproline	8.74	Tyrosine	1.17
Glutamic acid	9.64	Phenylalanine	1.01
Thréonine	2.20	Hydroxylisine	5.15
Aspartic acid	6.04	Lysine	3.51
Alanine	8.76	Histidine	1.12
Valine	1.74	Arginine	8.00
Methionine	1.80	Serine	6.04

COLLAGEN HM is composed of 18 main amino-acids. Proline and hydroxyproline are the most characteristic amino acid of collagen. Glycine represents 20% of the total amino acids.

SOLUBILITY soluble in water

• ENERGY VALUE 363 kcal/100g

STORAGE

Packaging 20kg bag in box Shelf life 48 months
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.



1 Library Bouler

Emmanuel Boucher, Luce Sergent, Innovation & Marketing

Manager

- REGULATION DATA - the data below have value of certificate

COMPOSITION

Compound	Source	CAS#	EC#	Incorporated quantity (% on dry matter)
Collagens, hydrolyzates	Fish* Zone FAO 27	92113-31-0	295-635-5	98.85
Citric acid monohydrate**	Fermentation	5949-29-1	201-069-1	1
***Flavour	Identical to natural and natural	/	/	0.15

^{*}Main fish species: Cod (*Gadus morhua*), Saithe (*Pollachius virens*), Haddock (*Melanogrammus aeglefinus*) and Plaice (*Pleuronectes platessa*)

Flavouring components: flavouring substances, natural flavouring substances

Carrier: maltodextrin

Additives: anti-caking agent E504 (3.5%)

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 CE.

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.

^{**}Complies with Regulation (EC) No 231/2012

^{***}Complies with Regulation (EC) No 1334/2008



Hidail

Emmanuel Boucher, Production Manager



Luce Sergent, Innovation & Marketing Manager



• HAZARDOUS SUBSTANCES Regularly checked according to a periodic control plan Complies with Regulations (EC) No 1881/2006 and (EC) No 2016/355

	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	
Copper	Max. 30 ppm	
Zinc	Max. 50 ppm	
Sulfur dioxide	Max. 10 ppm	
H2O2	10 ppm	Eur. Pharmacopeia
Dioxins Sum of dioxins and dioxin-like PCBs Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180	Max. 3.5 pg/g (on fresh fish) Max. 6.5 pg/g (on fresh fish) Max. 75 ng/g	High resolution GC/MS High resolution GC/MS Ma
Arsenic Melamine	Max. 1ppm Max. 2.5 ppm	mineralization + ICP-MS

MICROBIOLOGICAL DATA Guaranteed for each batch

	Specification	Test method
Total plate count	Max. 10,000 CFU/g	Petrifilm
Enterobacteriaceae	Max. 10 CFU/g	AFNOR V08-054
Staphylococcus aureus	Absent / 1g	European Pharmacopoeia
E.coli	Absent / 1g	European Pharmacopoeia
Yeasts and moulds	Max. 100 CFU/g	AFNOR XP V08-059
Salmonella	Absent / 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.





Emmanuel Boucher, Production Manager



Luce Sergent, Innovation & Marketing Manager



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

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