

HENRY LAMOTTE OILS GMBH, POSTFACH / P.O. BOX 10 38 49, D-28038 BREMEN

Metapharmaceutical Ind., S.L.

production date: 04/2020

Josep Plà, 163, 2º 5ª

expiry date: 04/2022

08020 Barcelona

Spain

Order No.: 2020-1/439 dated 13.11.2020

Certificate of Analysis

16.11.2020

MEDICINAL COD LIVER OIL, PH.EUR., IDENTITY PRESERVED

lot: 8006235002

Ph.Eur.10, 2020, Typ A, BP 2020 Type A

Appearance	complies
Specific gravity (20 degree C)	0,923
Specific gravity (25 degree C)	0,921
Refractive index (20 degree C)	1,477
Acid value	0,12
Anisidine value	9,6
Peroxide value	complies
Iodine value	152
Saponification value	185
Water	0,01 %
Unsaponifiable Matter	1,1 %
Cold test 3h at 0°C	clear
Colour gardner	4,0
Colour lovibond 5 1/4" yellow	36,0
Colour lovibond 5 1/4" red	1,5

Fatty acid composition

Saturated fatty acids:

Lauric acid	(C 12:0)	< 0,1 %
Myristic acid	(C 14:0)	3,6 %
Pentadecane acid	(C 15:0)	0,3 %
Palmitic acid	(C 16:0)	9,6 %
Margaric acid	(C 17:0)	0,4 %
Stearic acid	(C 18:0)	2,2 %
Arachidic acid	(C 20:0)	0,1 %
Behenic acid	(C 22:0)	< 0,1 %
Lignoceric acid	(C 24:0)	0,1 %

Unsaturated fatty acids:

Myristoleic acid	(C 14:1)	0,3 %
Palmitoleic acid	(C 16:1)	7,4 %
cis-Vaccenic acid	(C 18:1 (n-7))	4,7 %
Oleic acid	(C 18:1 (n-9))	15,3 %
Gadoleic acid	(C 20:1 (n-11))	2,5 %
Gondoic acid	(C 20:1 (n-9))	11,7 %
Erucic acid	(C 22:1 (n-9))	0,9 %

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Cetoleic acid	(C 22:1 (n-11))	8,8 %
Polyunsaturated fatty acids:		
Linoleic acid	(C 18:2)	1,4 %
Linolenic acid	(C 18:3 (n-3))	0,7 %
Moroctic acid	(C 18:4 (n-3))	1,7 %
Eicosanedienoic acid	(C 20:2)	0,3 %
Eicosanetrienoic acid	(C 20:3 (n-3))	0,2 %
Eicosanetrienoic acid	(C 20:3 (n-6))	0,7 %
Eicosanetetraenoic acid	(C 20:4 (n-3))	< 0,1 %
Arachidonic acid	(C 20:4 (n-6))	0,3 %
Eicosapentaenoic acid	(C 20:5 (n-3), EPA)	7,2 %
Docosatetraenoic acid	(C 22:4)	< 0,1 %
Docosapentaenoic acid	(C 22:5 (n-3), DPA)	1,3 %
Docosahexaenoic acid	(C 22:6 (n-3), DHA)	9,4 %
Vitamin A		1230 i.U./g
Vitamin D3		98 i.U./g
Pesticides		
Organochloropesticides		complies to RHmV
Organophosphoruspesticides		complies to RHmV
Toxaphen		complies to RHmV
Polychlorinated biphenyls		
28		< 0,02 mg/kg
52		< 0,02 mg/kg
101		< 0,02 mg/kg
138		< 0,02 mg/kg
153		< 0,02 mg/kg
180		< 0,02 mg/kg
Dioxin		
WHO-PCDD/F-TEQ (Total Dioxins)		0,253 pg/g
WHO-PCDD/F-PCB-TEQ (Dioxins + dioxin-like PCBs)		0,676 pg/g
Identity		complies
Purity		complies

This product in question is not affected by the GMO problem. Therefore this product does not need to be labelled regarding any genetic modification as per the new GMO regulations 1829/2003 and 1830/2003.

HENRY LAMOTTE OILS GMBH

Computer edited certificate - valid without signature