

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

Pharmachem Jozef Susnik  
Dipl. Ing., S.P.  
Vidovdanska 2

production date: 01/2020

expiry date: 01/2022

1000 Ljubljana  
Slovenia

Order No.: PER E-MAIL vom 21.04.2020

## Certificate of Analysis

24.04.2020

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

lot: 8006235001

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

Appearance		complies
Specific gravity (20 degree C)		0,924
Specific gravity (25 degree C)		0,921
Refractive index (20 degree C)		1,479
Acid value		0,04
Anisidine value		10,1
Peroxide value		complies
Iodine value		153
Saponification value		186
Water		< 0,01 %
Unsaponifiable Matter		1,0 %
Cold test 3h at 0°C		clear
Colour gardner		3,1
Colour lovibond 5 1/4" yellow		22,0
Colour lovibond 5 1/4" red		0,9

#### Fatty acid composition

##### Saturated fatty acids:

Lauric acid	(C 12:0)	< 0,1 %
Myristic acid	(C 14:0)	3,9 %
Pentadecane acid	(C 15:0)	< 0,1 %
Palmitic acid	(C 16:0)	11,0 %
Margaric acid	(C 17:0)	0,5 %
Stearic acid	(C 18:0)	2,5 %
Arachidic acid	(C 20:0)	0,4 %
Behenic acid	(C 22:0)	< 0,1 %
Lignoceric acid	(C 24:0)	< 0,1 %

##### Unsaturated fatty acids:

Myristoleic acid	(C 14:1)	< 0,1 %
Palmitoleic acid	(C 16:1)	6,9 %
cis-Vaccenic acid	(C 18:1 (n-7))	4,6 %
Oleic acid	(C 18:1 (n-9))	15,2 %
Gadoleic acid	(C 20:1 (n-11))	2,3 %
Gondoic acid	(C 20:1 (n-9))	10,9 %
Erucic acid	(C 22:1 (n-9))	0,8 %
Cetoleic acid	(C 22:1 (n-11))	9,2 %



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**Polyunsaturated fatty acids:**

Linoleic acid	(C 18:2)	1,5 %
Linolenic acid	(C 18:3 (n-3))	0,8 %
Morocotic acid	(C 18:4 (n-3))	2,2 %
Eicosanedienoic acid	(C 20:2)	< 0,1 %
Eicosanetrienoic acid	(C 20:3 (n-3))	< 0,1 %
Eicosanetrienoic acid	(C 20:3 (n-6))	0,7 %
Eicosanetraenoic acid	(C 20:4 (n-3))	< 0,1 %
Arachidonic acid	(C 20:4 (n-6))	0,4 %
Eicosapentaenoic acid	(C 20:5 (n-3), EPA)	8,7 %
Docosatetraenoic acid	(C 22:4)	0,6 %
Docosapentaenoic acid	(C 22:5 (n-3), DPA)	1,2 %
Docosahexaenoic acid	(C 22:6 (n-3), DHA)	10,3 %

Vitamin A	1300 i.U./g
Vitamin D3	100 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)	0,636 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

A handwritten signature in blue ink, appearing to read 'Rožamarija Čučnik', is written over a faint, illegible background.

**ROŽAMARIJA ČUČNIK MAG.FARM.**  
**STROKOVNI SODELAVEC**

11-05-2020