

Akraborg
Kalmansvellir 6
300 Akranes
Iceland

Report no.: A-16237
Page no.: 1/4
Date: 26.04.2024

DATE OF RECEIVE: 04.03.2024 SUBJECT: Foodstuff
DATE OF ANALYSIS: 11.03.2024 SAMPLING: Client
NUMBER OF SAMPLES: 1

Reg.no Sample identification from client

229-24 Smoked Cod liver, 2024 production
Tested on total can content of oil and liver pieces

Reg.no	Test	Results
229-24	Lead ** DIN EN 15763, ICP-MS:2010-04	<0,020 mg/kg
	Cadmium ** DIN EN 15763, ICP-MS:2010-04	0,27 mg/kg
	Mercury ** DIN EN 15763, ICP-MS:2010-04	0,042 mg/kg
	Arsenic ** DIN EN 15763, ICP-MS:2010-04	5,2 mg/kg
	Calcium ** § 64 LFGB L 00.00-144, ICP-OES:2019-07	51 mg/kg
	Potassium ** § 64 LFGB L 00.00-144, ICP-OES:2019-07	1432 mg/kg
	Iron ** § 64 LFGB L 00.00-144, ICP-OES:2019-07	19,1 mg/kg
	Arsenic, inorganic ** PNTe/LQM/FYQ/305, LC-ICP-MS:2023-09	<0,010 mg/kg
	Vitamin A ** § 64 LFGB L 00.00-63/1:2015-06	33044 µg/100g
	Vitamin D3 ** § 64 LFGB L 00.00-61:2010-01	187 µg/100g
	Histamine ** PB-161/LF ed.4, HPLC-DAD:2022-01	<6,0 mg/kg
	Pesticides GC-MS/MS ** §64 LFGB L 00.00-115 mod:2018-10. According to list GÖST (01/05/2023)	See below
	Hexachlorobenzene	0,018 mg/kg
	Chlordane,cis	0,050 mg/kg
	Chlordan, total	0,050 mg/kg
	DDE-p,p	0,083 mg/kg
	DDD-p,p	0,035 mg/kg
	DDT-o,p	0,026 mg/kg
	DDT,total	0,16 mg/kg
	Dieldrin	0,062 mg/kg
	Aldrin/Dieldrin total	0,062 mg/kg
	Pesticides LC-MS/MS ** §64 LFGB L 00.00-115 mod:2018-10. According to list GÖST (01/05/2023)	Not detectable



Akraborg
Kalmansvellir 6
300 Akranes
Iceland

Report no.: A-16237
Page no.: 2/4
Date: 26.04.2024

Reg.no	Test	Results
229-24	Dioxin (PCDD) - Furans (PCDF) ** VO (EU) 2017/644 (GC/MS/MS) : 2017-04	
	2,3,7,8-Tetra CDD	0,263 pg/g
	1,2,3,7,8-Penta CDD	0,078 pg/g
	1,2,3,4,7,8-Hexa CDD	<0,036 pg/g
	1,2,3,6,7,8-Hexa CDD	0,456 pg/g
	1,2,3,7,8,9-Hexa CDD	<0,084 pg/g
	1,2,3,4,6,7,8-Hepta CDD	0,123 pg/g
	Octa CDD	<0,553 pg/g
	2,3,7,8-Tetra CDF	18,6 pg/g
	1,2,3,7,8-Penta CDF	1,51 pg/g
	2,3,4,7,8-Penta CDF	1,03 pg/g
	1,2,3,4,7,8-Hexa CDF	0,194 pg/g
	1,2,3,6,7,8-Hexa CDF	0,348 pg/g
	1,2,3,7,8,9-Hexa CDF	0,390 pg/g
	2,3,4,6,7,8-Hexa CDF	<0,084 pg/g
	1,2,3,4,6,7,8-Hepta CDF	0,109 pg/g
	1,2,3,4,7,8,9-Hepta CDF	<0,132 pg/g
	Octa CDF	<0,288 pg/g
	Sum of dioxins (WHO PCDD/F TEQ) incl. LOQ (100%)	2,72 pg/g
	TEQ = Toxicity Equivalence	
	Dioxin-like PCB's ** VO (EU) 2017/644 (GC/MS/MS) : 2017-04	
	PCB 77	79,3 pg/g
	PCB 81	<0,280 pg/g
	PCB 126	92,4 pg/g
	PCB 169	33,2 pg/g
	PCB 105	6070 pg/g
	PCB 114	350 pg/g
	PCB 118	19700 pg/g
	PCB 123	<1,33 pg/g
	PCB 156	1460 pg/g
	PCB 157	457 pg/g
	PCB 167	1050 pg/g
	PCB 189	108 pg/g
	Sum of dl-PCB (WHO PCB's TEQ) incl. LOQ (100%)	11,1 pg/g
	TEQ = Toxicity Equivalence	
	Sum of Dioxins+dl-PCB (WHO-TEQ) incl. LOQ (100%)	13,8 pg/g
	TEQ = Toxicity Equivalence	



Akraborg
Kalmansvellir 6
300 Akranes
Iceland

Report no.: A-16237
Page no.: 3/4
Date: 26.04.2024

Reg.no	Test	Results
229-24	PAH ** HH-MA-M 02-105, #U HPLC-FLD:2023-06	
	Benzo(a)anthracene	<1,0 µg/kg
	Chrysen	<1,0 µg/kg
	Benzo(b)fluoranthene	<1,0 µg/kg
	Benzo(a)pyrene	<1,0 µg/kg
	PCB, non-Dioxin like ** VO (EU) 2017/644 (GC/MS/MS):2017-04	
	PCB 28	3,25 ng/g
	PCB 52	6,83 ng/g
	PCB 101	14,2 ng/g
	PCB 138	21,9 ng/g
	PCB 153	19,5 ng/g
	PCB 180	11,1 ng/g
	Sum of PCB 28,52,101,138,153,180	76,8 ng/g
	Nitrosamines ** S 64 LFGB L 00.00-17 GC-TEA:1987-11	
	N-Nitrosodimethylamine (NDMA)	<0,50 µg/kg
	N-Nitrosomethylethylamine (NMEA)	<0,50 µg/kg
	N-Nitrosodiethylamine (NDEA)	<0,50 µg/kg
	N-Nitrosodipropylamine (NDPA)	<0,50 µg/kg
	N-Nitrosodiisobutylamine (NDiBA)	<0,50 µg/kg
	N-Nitrosodibutylamine (NDBA)	<0,50 µg/kg
	N-Nitrosomorpholine (NMOR)	<0,50 µg/kg
	N-Nitrosopyrrolidine (NPYR)	<0,50 µg/kg
	N-Nitrosopiperidine (NPIP)	<0,50 µg/kg
	Perfluoroalkyl substances (PFAS)** HH-MA-M 02-175, LC-MS/MS:2023-04	
	Perfluorooctanesulfonic acid (PFOS)	0,31 µg/kg
	Perfluorooctanoic acid (PFOA)	<0,10 µg/kg
	Perfluorononanoic acid (PFNA)	0,11 µg/kg
	Perfluorohexane sulfonic acid (PFHxS)	<0,10 µg/kg
	PFAS sum (PFOS, PFOA, PFNA, PFHxS)	0,42 µg/kg



Akraborg
Kalmansvellir 6
300 Akranes
Iceland

Report no.: A-16237
Page no.: 4/4
Date: 26.04.2024

Reg.no	Test	Results
229-24	Mineral oil hydracarbons** HH-MA-M 03-055#U, LC/GC-FID:2023-05	
	MOSH/POSH (C10-16)	<0,50 mg/kg
	MOSH/POSH (C17-20)	<0,50 mg/kg
	MOSH/POSH (C21-25)	0,55 mg/kg
	MOSH/POSH (C26-35)	0,63 mg/kg
	MOSH/POSH (C36-40)	<0,50 mg/kg
	MOSH/POSH (C41-50)	<0,50 mg/kg
	MOSH/POSH sum (C10-50)	1,7 mg/kg
	MOAH (C10-16)	<0,50 mg/kg
	MOAH (C17-25)	0,62 mg/kg
	MOAH (C26-35)	0,67 mg/kg
	MOAH (C36-50)	<0,50 mg/kg
	MOAH sum (C10-50)	1,3 mg/kg

Assessment

The results from the analysis of the above mentioned sample are all below the limit values specific for fish liver and fish liver products mentioned in EU Commission Regulation No. 2023/915 including the consolidated amendments.


Ulla Bendtsen


Ulla Jensen

** Analysed under accr. No. D-PL-14170-01-00

This report may not be reproduced, except in its entirety, without the prior permission in writing of the Laboratory. The test result solely applies to the tested material mentioned in this report.

Højmarklaboratoriet A/S, Adelvej 11, Højmark, DK-6940 Lem st., Danmark
Telefon + 45 97 34 33 66, Telefax + 45 97 34 34 35, www.hojmarklab.dk

