



ANALYSESERTIFIKAT FOR HAVFRØENES TRAN

RESULTS:

SPECIFICATIONS:

METHODS:

Quality analysis:

Vitamin A (µg/g)	65,9	65,22µg/g	M.1
Vitamin E(mgTE/g)	2,11	2,17mgTE/g	M.2
Vitamin D3(µg/g)	0,86	1,09µg/g	E.1
Free Fatty Acids (FFA,%)	0,11	Max. 0,2	M.3
Peroxide Value (PV, meq/kg)	0,47	Max. 1,0	M.4
p-Anisidin value (p-AV)	2,06	Max. 3	M.5
Saponification Value (ppm)	0	Max. 192	M.6
Unsaponifiable matter (%)	1,1	Max. 1,5	M.7
Iodine value	153	150-185	M.8
Colour test (Gardner Units)	2+	Max. 8	M.9
Refractive index (20°C)	1,476	1,477 – 1,484	
Eicosapentaenoic acid (EPA,%)	8,7	Min. 7,0	M.11
Docosahexaenoic acid (DHA,%)	10,41	Min. 11,0	M.11
Total omega-3 fatty acids (%)	24,7	Min. 24	M.11
Saturated fatty acids (%)	16,7	Typically 16-18	M.11
Monounsaturated fatty acids (%)	54,5	Typically 45-52	M.11
Polyunsaturated fatty acids (%)	28,7	Typically 27-29	M.11

EXT. ANALYSIS, PARAMETER

SPECIFICATIONS

RESULTS

METHODS

Environmental poisons min. 2 times/year

METALS

Mercury (mg/kg)	< 0,02	<0,01	E.2
Lead (mg/kg)	< 0,1	<0,01	E.2
Cadmium (mg/kg)	< 0,02	<0,004	E.2
Tin (mg/kg)	< 50	<0,02	E.2

ORGANIC

<u>Sum Dioxins and Dioxin like PCB's</u> (ng WHO-TEQ/kg):	2,0	0,58	
- Dioxins ; dioxins/furans			E.3
- Dioxin like PCB's; non-ortho, monoortho PCB's			E.4
<u>Pesticides</u>			E.5
Total chlordane's (mg/kg)	< 0,05	<0,01	E.5
Total DDT= DDD,DDE,DDT (mg/kg)	< 0,25	<0,045	E.5
Dieldrin (mg/kg)	< 0,01	<0,01	E.5
HCB (mg/kg)	< 0,02	<0,005	E.5
-HCH (mg/kg)	< 0,01	<0,01	E.5
-HCH = Lindane (mg/kg)	< 0,01	<0,01	E.5
Toxaphenes (sum congener 26, 50, 66) (mg/kg)	< 0,06	<0,02	E.6

MICROORGANISMS

Total viable aerobic count (cfu/g)	Not more than 10 ²	<10	E.7
E.Coli *)	Negative	<10	E.8
Salmonella	Negative	0	E.9

OTHER ANALYSIS (4 times/year)

Relative density (g/ml at 20°C)	0,917 –0,930	0,92	E.10
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