

Création /Creator	Rédacteur /Redactor	Nom du Document/Document title	Version /Version	Mise à jour /Update	Type /Category	Processus /Process
 PERLES DE GASCOGNE <i>Rare oils designer</i>	Camille Vessiere Validation <i>Validation</i>	Bulletin d'analyse huile vierge de chanvre biologique	1.001	29/11/2016	PC	S3
29/11/2016	Christophe Merle	Organic virgin hemp seed oil certificate of analysis	Code/Code	S3-008/1.001		

Product Name	Organic Hemp Seed Virgin Oil
Ref	CHHBV1
INCI	Cannabis Sativa Seed Oil
CAS	89958-21-4
INICS	289-644-3
Botanic name	Cannabis Sativa
Common names	Hemp
Part used	Seed
Origin	France
Composition	100%
Appearance	Fluid, Clear, Bright
Color	Sustained green, gold highlights
Flavor and Taste	Flavor of seeds, nuts, asparagus slight herbal notes



Fatty Acids composition

Criteria	Analytical Method	CHHBV1	Unit
C16:0	Internal methodology	5-9	%
C18:0		1-3	%
C18:1 (n-9c)		10-14	%
C18:2 (n-6c)		50-60	%
C18:3 (n-3c)		14-18	%
C18:3 (n-6c)		2-6	%
Mono-saturated fatty acids		10-14	%
Poly-saturated fatty acids	Internal methodology	65-80	%
Saturated fatty acids		8-12	%
Trans fatty acids		<0,1	%

Tocopherols and Tocotrienols content

Criteria	Analytical Method	CHHBV1	Unit
alpha-tocophérol	EN 12822:2014	30-50	mg/Kg
béta-tocophérol		<10	mg/Kg
gamma-tocophérol		600-1100	mg/Kg
delta-tocophérol		30-50	mg/Kg
alpha-tocotrienol	NF EN ISO 9936:2006	<10	mg/Kg
béta-tocotrienol			mg/Kg
gamma-tocotrienol			mg/Kg
delta-tocotrienol			mg/Kg
Tocopherols et tocotrienols total content		600-1200	mg/Kg
Vitamin E content		9-16	mg/100 g

$$V\&E = (W_{\alpha} \times 0,67W_{\alpha} + 0,50W_{\beta} + 0,10W_{\gamma} + 0,03W_{\delta}) \times 10$$
 Calculation according to "Food and Nutrition Board and Institute of Medicine, Washington DC, National Academy Press, 2000"

Quality criteria and Indices

Criteria	Analytical Method	CHHBV1	Unit
Acid Value	Internal methodology	< 4	mgKOH/g
Insoluble impurities content	NF ISO 663	< 0,05	%
Oleic Acidity	Internal methodology	< 2	%
Peroxyd Index		<15	meq O2/Kg
Water content and volatils		<= 0,4	%

Nutritional Facts

Population	Adult	2000 kcal/j	Average Values		RDA&RDI		
CLASS	FAMILY	Components	CHHBVI	Unit	Value	Unit	% RDA&RDI /20g
Energy	Energy	Energy	177,6	kcal/20g	2000	kcal/j	0,09
Lipids	Saturated Fatty Acids	Non Essential Fatty Acids	1,8	g/20g	26,67	g/j	< 6,75%
		C12:0+C14:0+C16:0	1,3	g/20g	17,78	g/j	< 7,3125%
	Mono Unsaturated Fatty Acids	C18:1 (n-9c)	2,8	g/20g	38,89	g/j	0,07
	Poly Unsaturated Fatty Acids	ALA C18:3 (n-3c) ω3	3,2	g/20g	2,22	g/j	1,44
		LA C18:2 (n-6c) ω6	11,5	g/20g	8,89	g/j	1,29
	Total Lipids	Total Lipids	20	g/20g	83,33	g/j	0,24
Vitamins	Fat-soluble vitamins	Vit E	3,3	mg/20g	12	mg/j	0,28
		Vit A	0	µg/20g	800	mg/j	0,00
		Vit D	0	µg/20g	5	mg/j	0,00
		Vit K	0	µg/20g	75	mg/j	0,00

20 g is the equivalent of a tablespoon
 RDA: Recommended Dietary Allowances (Ref ANSES)
 ANSES: National Agency for Food Safety, Environment and Labour (French equivalent of USDA)
 RDI: Recommended Daily Intake (Ref CE/1169)

External contaminants & Undesirable constituents *

Category	Criteria	Analytical Method	CHHBV1	Unit	Criteria	Analytical Method	CHHBV1	Unit
Diverse	Dioxins	Internal methodology	<0,75	pg OMS-PCDD/F-TEQ / g	Moulds	NF V08-036	<100	Unit/g
	Phthalates		<100	µg/kg	Salmonella	BRD 07/11-12/05	0	Unit/25g
	THC	LC/UV-Méthode interne	<5	µg/mL	Yeasts	NF V08-036	<100	Unit/g
Metal/Heavy metal	Mercury	Internal methodology	<0,005	mg/Kg	Flore aerobic mesophilic (30 ° C)	NF EN ISO 4833-1	<200	Unit/g
	Arsenic		<0,03	mg/Kg	HA AC175 : Candida albicans	Internal methodology	0	Unit/g
	Cadmium		<0,01	mg/Kg	Pseudomonas spp.		<100	Unit/g
	Tin		<0,03	mg/Kg	Coagulase-positive staphylococci	NF EN ISO 6888-3		Unit/g
	Nickel		<0,15	mg/Kg	Enterobacteria	AES 10/07-01/08	<10	Unit/g
	Lead		<0,04	mg/Kg				
Mycotoxins	Antimony	Internal methodology	<0,02	mg/Kg				
	Barium		<0,06	mg/Kg				
	Ochratoxin A		<1	µg/kg				
Pesticides	Aflatoxins B1,B2,G1,G2 (Total)		<4	µg/kg				
	Aflatoxins B1		<1	µg/kg				
	GC 250 Multirésidus		0	mg/Kg				
Polycyclic Aromatic Hydrocarbons	LC 250 Multirésidus			mg/Kg				
	Total Polycyclic Aromatic Hydrocarbons (PAHs)		<0,5	µg/kg				
	Benzo(a)pyrene			µg/kg				
Undesirable constituents	Copper		<0,4	mg/Kg				
	Iron		<5	mg/Kg				

MENTIONS AND RESTRICTIONS OF USE	
Food allergen	
1169/2011/EC	May contains traces of:
Annexe II	Walnut, Hazelnut, Lupin, Mustard, Soy, Oat
TetraHydroCannabinol Content:	
EC legislation: 1307 / 2013, 1308/2013 and 809/2014 modified by 1155/2017 and 1172/2017.	Produced with the seeds of varieties authorized by the European Community, provisions transcribed in French law, in the decree of 22/08/1990 implementing article R5132-86 of the public health code for cannabis and can not according to these legislative provisions contain more than 0.2% of THC; threshold below which all the products transformed of these seeds are perfectly in agreement with the French and European legislation.

* Controlled with a frequency defined by our control plan (available on demand)
Internal Methodology : methodology based on the methodology of reference (if one) developed by the laboratory in charge

PRODUCTION AND STORAGE
Manufacturing process : Mechanically cold pressed
Shell life : 18 month of best before date from date of production
Storage :
Before opening : keep away from light, heat(T<20°C) and in a dry place.
After opening : keep the product in original packaging away from light, heat (T<20°C), and in a dry place. Inert with nitrogen, close quickly after using (t opening<15mn).
Packaging : 1Kg, 5kg, 25kg, 200kg, 800 kg PEHD conditionning.