| Création /Creator | Rédacteur /Redactor | Nom du Document/Document title | Version /Version | Mise à jour /Update | Type /Category | Processus /Process |
|---|---|---|---|---|---|---|
| PERLES DE GASCOGNE Rare oils designer | Camille Vessiere | Fiche de spécification huile vierge de noisette | 1.001 | 05/07/2018 | DOC | S3 |
| | Validation /Validation | | | | | |
| 05/07/2018 | Christophe Merle | Virgin hazelnut oil specification data sheet | Code/Code | S3-091/1.001 | | |

| Product Name | Hazelnut virgin Oil |
|---|---|
| Ref | N7HUVI |
| INCI | Corylus Avellana Seed Oil |
| CAS | 84012-21-5 |
| EINICS | 281-667-7 |
| Botanic name | Corylus Avellana |
| Common names | Hazel |
| Part used | Fruit |
| Origin | France |
| Composition | 100% |
| Appearance | Fluid, Clear, Bright |
| Color | Light yellow gold |
| Flavor and Taste | Neutral flavor, light notes of fresh hazelnut |

COSME BIO COSMOS APPROVED

Approved by ECOCERT RAW MATERIAL COSMOS APPROVED

**Fatty Acids composition**

| Criteria | Analytical Method | N7HUVI | Unit |
|---|---|---|---|
| C16:0 | Internal methodology | 4-10 | % |
| C18:0 | | 1-4 | % |
| C18:1 (n-9c) | | 70-85 | % |
| C18:2 (n-6c) | | 10-20 | % |
| Mono-saturated fatty acids | | 70-85 | % |
| Poly-saturated fatty acids | | 10-20 | % |
| Saturated fatty acids | | 5-15 | % |
| Trans fatty acids | | <0,1 | % |

**Tocopherols and Tocotriénols content**

| Criteria | Analytical Method | N7HUVI | Unit |
|---|---|---|---|
| alpha-tocophérol | EN 12822:2014 | 240-540 | mg/Kg |
| bêta-tocophérol | | 6-22 | mg/Kg |
| gamma-tocophérol | | 6-104 | mg/Kg |
| delta-tocophérol | | 3-33 | mg/Kg |
| alpha-tocotrienol | NF EN ISO 9936:2006 | <10 | mg/Kg |
| bêta-tocotrienol | | | mg/Kg |
| gamma-tocotrienol | | | mg/Kg |
| delta-tocotrienol | | | mg/Kg |
| Tocopherols et tocotrienols total content | | 300-600 | mg/Kg |
| Vitamin E content | | 25-75 | mg/100 g |

Vit E = (Walpha + 0,67Wacétate + 0,50Wbeta + 0,10Wgamma + 0,03Wdelta)/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 | N7HUVI | Unit |
|---|---|---|---|
| Acid Value | Internal methodology | < 4 | mgKOH/g |
| Insoluble impurities content | NF ISO 663 | < 0,05 | % |
| Oleic Acidity | Internal methodology | < 2 | % |
| Peroxyd Index | | <10 | meq O2/Kg |
| Water content and volatils | | < = 0,4 | % |

**Nutritional Facts**

| Population | Adult | 2000 kcal/j | Average Values | | RDA&RDI | | |
|---|---|---|---|---|---|---|---|
| CLASS | FAMILY | Components | N7HUVI | 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 | 2 | g/20g | 26,67 | g/j | < 7,5% |
| | | C12:0+C14:0+C16:0 | 1,4 | g/20g | 17,78 | g/j | < 7,875% |
| | Mono Unsaturated Fatty Acids | C18:1 (n-9c) | 15,5 | g/20g | 38,89 | g/j | 0,40 |
| | Poly Unsaturated Fatty Acids | ALA C18:3 (n-3c) ω3 | 0 | g/20g | 2,22 | g/j | 0,00 |
| | | LA C18:2 (n-6c) ω6 | 3 | g/20g | 8,89 | g/j | 0,34 |
| | Total Lipids | Total Lipids | 20 | g/20g | 83,33 | g/j | 0,24 |
| Vitamins | Fat-soluble vitamins | Vit E | 9,5 | mg/20g | 12 | mg/j | 0,79 |
| | | 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)

RDI: Recommended Daily Intake (Ref CE/1169)

ANSES: National Agency for Food Safety, Environment and Labour (French equivalent of USDA)

**External contaminants & Undesirable constituents** *

| Category | Criteria | Analytical Method | N7HUVT | Unit |
|---|---|---|---|---|
| Diverse | Dioxins | Internal methodology | <0,75 | pg OMS-PCDD/F-TEQ / g |
| | Phtalates | | <100 | µg/kg |
| Metal/Heavy metal | Mercury | | <0,005 | mg/Kg |
| | Arsenic | | <0,03 | mg/Kg |
| | Cadmium | | <0,01 | mg/Kg |
| | Tin | | <0,03 | mg/Kg |
| | Nickel | | <0,15 | mg/Kg |
| | Lead | | <0,04 | mg/Kg |
| | Antimony | | <0,02 | mg/Kg |
| | Barium | | <0,06 | mg/Kg |
| Mycotoxins | Ochratoxin A | | <1 | µg/kg |
| | Aflatoxins B1,B2,G1,G2 (Total) | | <4 | µg/kg |
| | Aflatoxins B1 | | <1 | µg/kg |
| Pesticides | GC 250 Multirésidus | | <0,01 | mg/Kg |
| | LC 250 Multirésidus | | | mg/Kg |
| Polycyclic Aromatic Hydrocarbons | 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 |

**Microbiology**

| Criteria | Analytical Method | N7HUVT | Unit |
|---|---|---|---|
| Moulds | NF V08-036 | <100 | Unit/g |
| Salmonella | BRD 07/11-12/05 | 0 | Unit/25g |
| Yeasts | NF V08-036 | <100 | Unit/g |
| Flore aerobie mesophile (30 ° C) | NF EN ISO 4833-1 | <200 | Unit/g |
| HA AC175 : Candida albicans | Internal methodology | 0 | Unit/g |
| Pseudomonas spp. | | <100 | Unit/g |
| Coagulase-positive staphylococci | NF EN ISO 6888-3 | | Unit/g |
| Enterobacteria | AES 10/07-01/08 | <10 | Unit/g |

**MENTIONS AND RESTRICTIONS OF USE**

| | | |
|---|---|---|
| Food allergen | Sensitive people, presence of : | Hazelnut. |
| 1169/2011/EC | May contains traces of: | |
| Annexe II | Walnut, Lupin, Mustard, Soy, Oat | |

**PRODUCTION AND STORAGE**

**Manufacturing process :** Mechanically cold pressed

**Shell life : 24** 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.

* 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