

Specification

Legal name	Rapeseed oil
Trade name	Refined rapeseed oil
Variety	<i>Brassica napus</i>
Ingredients	100% Refined rapeseed oil
Additives	None
Refining location	EU
Crude oil origin	-EU : France, Holland, Germany, Bulgaria, Spain, ... -Non EU* : Black Sea (Ukrain, ...) No supply from Crimea or Sevastopol regions according to EU Regulation 692/2014 These origins may evolve over time depending on different parameters and they are not definitive. We update this Technical Data Sheet at least once per year in case of changes regarding the geographical origins of the crude oils
Seeds origin	-EU : France, Spain, Romania, Bulgaria, Latvia, Lithuania... -Non EU* : Black Sea (Ukraine,...), Australia, Argentina, Uruguay, North Africa (Morocco, Tunisia) No supply from Crimea or Sevastopol regions according to EU Regulation 692/2014 These origins may evolve over time depending on different parameters and they are not definitive. We update this Technical Data Sheet at least once per year in case of changes regarding the geographical origins of the seeds
Legislation	All products supplied by AOIS meet all European and French laws and regulations as well as those contained in the CODEX ALIMENTARIUS
GMO position	Oils are made from « conventional » raw materials ; they are GMO free and are not subject to labelling, according to Regulations EC 1829/2003 and EC 1830/2003 and their subsequent modifications.

Organoleptic characteristics

State	Liquid at 20°C
Taste and smell	Neutral
Colour	Pale yellow

Average nutrition facts*

	Units	Norms (per 100 g)
Energy	kcal kJ	900 3700
Total fat	g	100
of which:		
Saturated fatty acids	g	6-8
Monounsaturated fatty acids	g	55-63
Polyunsaturated fatty acids	g	25-33
Trans fatty acids	g	≤1
Carbohydrates	g	0
of which:		
Sugars	g	0
Proteins	g	0
Salt	g	0

In compliance with the CIQUAL (ANSES)

Chemical and physical characteristics

Parameters	Units	Specifications	Norms
Specific gravity at 20°C	g/ml	0.914 - 0.920 *	NF EN ISO 6883
Refractive index	n ^{40D}	1.465 - 1.467 * (indicative)	NF EN ISO 6320
Saponification value	KOH mg/g	182 – 193 *	NF EN ISO 3657 AOCS Cd 3a-94
Iodine value (calculated)		105 – 126 *	NF EN ISO 3961 AOCS Cd 1c-85
Moisture	%	≤ 0.07	NF EN ISO 662
Free Fatty Acid as Oleic Acid	%	≤ 0.1	NF EN ISO 660
Alkalinity	mg/kg	≤ 5	NF EN ISO 10539
Peroxyde Value (Ex-works)	meqO ₂ /kg	Bulk ≤ 1 IBC and Drums ≤ 2	NF EN ISO 3960
Phosphorus content	mg/kg	≤ 5	NF ISO 10540-3

* In compliance with the CXS 210-1999 (Revised and Amended in 2019)

Fatty acid profile

Fatty acids	Carbon	Specification (%)	Methods and norms
Myristic	C14:0	≤ 0.2	Gas Chromatography NF EN ISO 12966-1 and NF EN ISO 12966-2 and NF EN ISO 12966-4
Palmitic	C16:0	2.5 – 7.0	
Palmitoleic	C16:1	≤ 0.6	
Stearic	C18:0	0.8 – 3.0	
Oleic	C18:1	51.0 – 70.0	
Linoleic	C18:2	15.0 – 30.0	
Linolenic	C18:3	5.0 – 14.0	
Arachidic	C20:0	0.2 – 1.2	
Gadoleic	C20:1	0.1 – 4.3	
Behenic	C22:0	≤ 0.6	
Erucic	C22:1	≤ 2.0	
Lignoceric	C24:0	≤ 0.3	

* In compliance with the CXS 210-1999 (Revised and Amended in 2019)

Microbiology

Oil is an anhydrous product and therefore it doesn't allow the proliferation of microorganisms.

Contaminants

Date **26/04/2023**

Parameters	Units	Food usage limits	Feed usage limits	Food usage regulation	Methods and norms
Heavy metals					
- Iron (Fe)	mg/kg	≤ 1.5	-	Regulation CE	ICP/MS
- Copper (Cu)	mg/kg	≤ 0.1	-	1881/2006 and its	after
- Lead (Pb)	mg/kg	≤ 0.1	≤ 10	subsequent	mineralization
- Arsenic (As)	mg/kg	≤ 0.1	≤ 2	modifications +	with
- Cadmium (Cd)	mg/kg	-	≤ 1	CXS 210-1999	micro-waves
- Fluor (F)	mg/kg	-	≤ 150	(revised and	and NF EN
- Mercury (Hg)	mg/kg	-	≤ 0.1	amended)	13805
Pesticides				Regulation CE	Gas
- Organophosphorus	mg/kg	< MRL	< MRL	396/2005 and its	Chromatography
- Organochlorine	mg/kg	< MRL	< MRL	subsequent	+ Mass
- Pyrethrinoides	mg/kg	< MRL	< MRL	modifications	Spectrometry
PAH and BaP					
- Benzo(a)pyrène (BaP)	µg/kg	≤ 2	-	Regulation CE	Gas
- Sum (Benzo(a)pyrène +	µg/kg	≤ 10	-	1881/2006 and its	Chromatography
Benzo(a)anthracène +				subsequent	+ Mass
Chrysène +				modifications	Spectrometry
Benzo(b)fluoranthène)					NF EN 16619
Dioxins and PCB					
- Sum of dioxin and		≤ 1.25 pg/g	≤ 1.5 ng/kg	Regulation CE	High
dioxin-like PCBs				1881/2006 and its	Resolution Gas
(OMS-PCDD / F-PCB-				subsequent	Chromatography
TEQ)				modifications	+ High
- Sum of dioxins (OMS-		≤ 0.75 pg/g	≤ 0.75 ng/kg		Resolution Mass
PCDD/ F-TEQ)		≤ 40 ng/g	≤ 10 µg/kg		Spectrometry
- Sum of 6 indicator PCBs					
Mineral Oil Aromatic	mg/kg	< 2	-	European	Liquid
Hydrocarbons (MOAH)				Commission	Chromatography
				recommandation	+ flame
				(21/04/2022)	ionization
				established limits	detection
				for the presence of	
				MOAH in food	
				products	
Hexane	mg/kg	≤ 1	-	Directive	NF EN ISO
				2009/32/EC and	9832
				any subsequent	
				amendment	
Glycidol esters	µg/kg	≤ 1000	-	Regulation CE	Gas
				1881/2006 and its	Chromatography
				subsequent	+ Mass
				modifications	Spectrometry
3-MCPD esters	µg/kg	≤ 1250	-		AOCS Cd 29b-
					13 or NF ISO
					18363-3

MRL = Maximum Residue Level; * In accordance with directive 2002/32/CE and its subsequent modifications

Allergens

Allergen ingredients *	Present in the product
1. Cereals containing gluten and products thereof	No
2. Crustaceans and products thereof.	No
3. Eggs and products thereof.	No
4. Fish and products thereof.	No
5. Peanuts and products thereof.	No
6. Soybeans and products thereof.	No
7. Milk and products thereof.	No
8. Nuts and products thereof.	No
9. Celery and products thereof.	No
10. Mustard and products thereof.	No
11. Sesame and products thereof.	No
12. Sulphur dioxide and sulphites at ≥ 10 mg/kg or 10 mg/L expressed in SO ₂	No
13. Lupin and products thereof.	No
14. Molluscs and products thereof.	No

* In accordance with European and French Regulations : Directive 2003/89/CE of the 10th of November 2003 and regulation 1169/2011 of the 25th of October 2011 and its subsequent amendments

Preservation

Shelf life	- Bulk : Best Before End (BBE) : 1 month from delivery to the customer - IBCs and Drums : Best Before End (BBE) : 12 months without opening
Storage conditions	Away from air, light and at room temperature (< 25°C)

Containers

Container types	- 25 tonne bulk liquid foodstuffs road tanker - IBC 1000 L / 920 kg - Drum 220 L / 200 kg
Food grade	Any type of material susceptible to enter in contact with the foodstuffs are non toxic, inert, compatible with the transported commodities and do not transfer any substance to, or have any harmful effect on, the commodities

Other information

Ionisation	No
UV and gamma irradiation	No
Hydrogenation	No
In compliance with "Vegetarian" definition	Yes
In compliance with "Vegan" definition	Yes
Presence of alcohol	No
Product of animal origin	No
In compliance with "halal" definition	Yes
REACH	The food oils are conform to CE regulation 178 / 2002 and 852 / 2004 and are not subject to REACH declaration (Article 2.5.b)
Novel food	No
Nanomaterials	No
Other information	Refer to the "AOIS Quality Book