

1. Product name

Refined Rapeseed Oil (100 %)

2. Sensory characteristics

Appearance, Colour	liquid, light yellow, clear & transparent
Taste	neutral or characteristic
Odour	characteristic, free of foreign and rancid odor

3. Chemical and physical characteristics

Parameter	Unit	Limits	Methods
Free fatty acids (FFA)	%	max. 0.1	ISO 660
Moisture	%	max. 0.05	ISO 8534
Impurities		ok	Filtertest
Peroxide value (POV)	meq O ₂ /kg	max. 1.0	ISO 3960
Jodine value	g Jod/100g	105 - 120	ISO 3961
Color Lovibond (5 ¼")	Lovibond Unit	max. 1.5 r max. 20 y	ISO 15305
Taste		min. 3	DGF C II 1
Phosphorus	mg/kg	max. 5	ISO 10540
Erucic acid	%	< 2	ISO 12966
Benzo(a)pyren	µg/kg	max. 2	ISO 22959
Benzo(a)anthracen, Chrysen, Benzo(b)fluoranthen, Benzo(a)pyren	µg/kg	max. 10	ISO 22959

4. Fatty acid composition (Area-%)

Parameter	Range	Method
Myristic acid C14:0	% 0 – 0.2	ISO 12966
Palmitic acid C16:0	% 3.5 – 5.3	
Palmitoleic acid C16:1	% 0 – 0.5	
Stearic acid C18:0	% 1.0 – 2.2	
Oleic acid C18:1	% 58.0 – 69.0	
Linoleic C18:2	% 17.5 – 24.0	
Linolenic acid C18:3	% 6.0 – 9.5	
Arachidic acid C20:0	% 0.3 – 1.0	
Eicosenic acid C20:1	% 0.8 – 1.8	
Behenic acid C22:0	% 0.0 – 0.6	
Erucic acid C22:1	% 0.1 – 1.99	
Lignoceric acid C24:0	% 0 – 0.3	
Nervonic acid C24:1	% 0 – 0.4	
Sum of trans-fatty acids	% max. 1.5	

5. Nutritional values (average per 100g product)

Energy value	3700 KJ
	900 kcal
Protein	0 g
Carbohydrates	0 g
Fat	100 g
- Saturated fatty acids	8 g
- Monounsaturated fatty acids	63 g
- Polyunsaturated fatty acids	29 g
Cholesterol	< 2 mg
Vitamin E	33 mg

6. Allergens

Contains no ingredients subject to declaration according to the EU Regulation 1169/2011 (Annex II), Directives 2009/89/EC and 2006/142/EC.

Contains no declarable ingredients according to the ALBA list (LeDa-list) version 2.0/2011.

7. Legal requirements

The product complies with:

Regulation (EC) No 1829/2003 on genetically modified food and feed.

Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labeling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC [See amending act(s)].

Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC.

Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs

Directive 2002/32/EC of the European Parliament and of the Council of 7 May 2002 on undesirable substances in animal feed

8. Seed origin

Europe

In exceptional cases, seeds from third countries are processed provided they comply with EU legislation and purchasing specifications.

9. Shelf life and storage conditions

At appropriate storage , e.g. cool and dark, the shelf life will be minimum 1 year.

Bunge Deutschland GmbH does not accept any complaints regarding the shelf life after delivery as the storage conditions at the customers premises are beyond our control. Even the slightest influence can have an effect on the product.

Ideal storage conditions are defined as follows:

- ➔ Minimal access of oxygen (nitrogen overlay or spraying possible).
- ➔ Store in a dark place, out of direct sunlight.
- ➔ The recommended storage temperature for tanker goods is usually < 20 °C.
- ➔ Storage in a closed stainless-steel tank or container for food.

10. Microbiology

Refined oils ex Bunge Deutschland GmbH meet the microbiological criteria for foodstuffs according to Directive (EC) 2073/2005.

Refined oils undergo a sterilization step in the process and are deodorized according to FEDIOL standard which effectively eliminates the microbiological activity. Furthermore oils are not susceptible to the growth of microorganisms due to the low water activity.

The quality control of Bunge Deutschland GmbH is based on risk assessment, control procedures and monitoring analyses and not on end product testing.

11. Further product information

REACH (Regulation (EU) 1907/2006)

<https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX%3A02006R1907-20140410>

All products for use in food and feed are exempted from registration according to Article 2, point 5b.

Instructions for safe use are available on request.