

Kluman and Balter Limited

The *i.o.* Centre Tel: 01992 704000 Unit 8

Lea Road Technical Department
Waltham Cross Tel: 01992 704002
EN9 1AS Fax: 01992 764937

E: technical@kaybeefoods.com

Product Specification

Product	: Rapeseed Oil	
Size / weight	: 20litre	
K & B Code	: 509201	
Date	: 19/06/2018	Issue No. : 13
Reason for Issue	: Countries of origin	amended

1.Product Description: A clear liquid oil suitable for culinary purposes.

2. Analytical Standards:

2.1. Chemical:

Parameter	Target Value	Limits	Method / Frequency
Free Fatty Acids	<0.15 % as oleic acid	0.15 max % as oleic	ISO 660
		acid	
Iodine Value	115 gl2/100g	105 – 126gl2/100g	GC
Refractive index (40°C)	1.466	1.465 – 1.467	Refractometer
Moisture	<0.1%	0.1% max	Karl Fisher
Relative density	0.915 g/cm2	0.910 -0.920 g/cm2	Specific gravity
Peroxide value	<2.0 meq O2/ kg	2.0 meq O2/ kg max	ISO 3960
Viscosity	94 centipoise @ 20°C		Not tested
Viscosity	40 Centipoise @ 40∘C		Not tested

2.2. Physical, including allowable contaminants and levels and organoleptic attributes:

Parameter	Target Value	Limits	Method / Frequency
Melting point	N/a		Not tested
Colour	<15 yellow, <1.5 red 5 ½ Lovibond	15 max yellow, 1.5 max red 5 ¼ Lovibond	AOCS CD8B-90
Odour	None	Free from rancid odour	Organaleptic
Taste	Bland	Free from off flavours	Organaleptic
Flash Point		300°C	Not tested
Fire Point		365°C	Not tested
Smoke Point		200°C	Not tested

2.3. Microbiological: Specifications are not applicable for pure oils as the product is microbiologically inert. The Institute of Food Science and Technologies' "Microbial Criteria for Foods" (ISBN 0 905367 16 2) notes that pathogens should be absent in refined oils and 100% fat products packed under good hygienic conditions and that monitoring is not required.

Parameter	Target Value	Limits	Method / Frequency
TVC	Less than 10cfu/g	Greater than 10cfu/g	Not tested
Entero	Less than 1 cfu/g	Greater than 1 cfu/g	Not tested
E.Coli	Less than 1 cfu/g	Greater than 1 cfu/g	Not tested
Salmonella	Absent in 25g	Absent in 25g	Not tested
Staph A	Less than 1 cfu/g	Greater than 1 cfu/g	Not tested
Yeasts & Moulds	Less than 10 cfu/g	Greater than 10 cfu/g	Not tested
Listeria	Absent in 25g	Absent in 25g	Not tested

3. Metal Detection: This product is filtered not metal detected. 500 MICRON MESH

Non Ferrous mm, Ferrous mm, Stainless Steel mm

Frequency of metal checking metal detector:

4. Nutrition: (State source of data) (Supplier data)

	Per 100g Typical - as supplied
Energy, Kjoules	3696 /100g
Energy, Kcals	899 /100g
Protein	<0.01 /100g
Fat	99.9 g/100g
of which saturates	6.6 g/100g
of which mono-unsaturates	57.2 g/100g
of which poly-unsaturates	31.5 g/100g
Carbohydrate	0.0 g/100g
of which sugars	0.0 g/100g
of which starch	0.0 g/100g
Sodium	<0.004 /100g
Fibre	0.0 /100g

5. Shelf Life:

Shelf life from date of production: Shelf life is 18 months from the packing date. Upon opening the product should be stored in a cool, dry place away from direct sunlight and strong odours. It is suggested that oils should be used within one month of being opened.

Minimum life on delivery to Kluman & Balter: 10 months

6. Storage and Transport Conditions:

6.1. Storage Conditions: Ambient, dry, away from strong odours & direct sunlight

6.2. Transport Conditions: Ambient, dry, away from strong odours & direct sunlight

7. Packaging

7.1 Primary Packaging: (unit of sale)

Dimensions (L x W x H) mm: Tin =280mm diameter x 385 mm high or Poly bottle 350mm x 280mm

Material and closure: Tinplate or polyethylene bottle in box

Weight of primary packaging:300g

Label position: only for tin Side of container

Label information: only for tin Quantity, Kluman & Balter, Batch code, BB date.

Coding information and example: 1234, 1=year, 234=day of year (365=31.12, 366 = 29.02)

7.2 Secondary Packaging: Box for bottle

Dimensions (L x W x H) mm: 370mm x 240mm x 295mm

Material and closure: Cardboard. Glue seal Weight of secondary packaging: 250g

Label position: Side of box

Label information: Product, supplier, batch & best before

Coding information and example: 1234

where:

1 represents the year of production,

234 represents the date of production and:

001 = 1st January, 365 = 31st December,

366 = 29th February.

7.3 Palletisation:

Palletisation: Units per layer: 14 Layers per pallet: 3

Type: 4W UK (1000 x 1200mm), Material: Wood.

Height of completed pallet: 1.3m (max 1.25m). Weight of completed pallet: 900 kg.

8. Weight Control:

Average weight or minimum weight: Minimum

Target Weight: 18.334kg Label Weight: 20 ltrs

9. Ingredient Declaration (legal): Vegetable Oil.

10. Raw Material Components (in descending order):

	1		1	1	
Ingredient, including	%	+/-	Supplier	Country of Origin	GM Status
compound ingredients.					
Rapeseed Oil	99.995			France, Germany,	Free of
'				Hungary,	GMO
				Slovakia, Poland,	
				Czech Republic,	
				Belgium, Austria,	
				Australia,	
				Denmark and UK	
E900 Anti-foam	0.005			Netherlands/Fran	Free of
				ce	GMO
				_	

Total	100		

There is no GM oilseed rape commercially available in Europe. Therefore no GM testing is undertaken and IP status is deemed unnecessary.

Manufactured in UK.

11. Flow diagram of manufacturing process, showing critical control points:

Stage in process C.C.P. (S = safety, L = legal, Q = quality) Raw Material Oil free from foreign bodies (S1) Oil free from water (S2) Quality of raw material purchased (Q1) Certificate of analysis (Q2) Processing/ Filter before filling (S3) Filtration Maintenance of filters (Q3) Filling/ Glass controls (S4) Packaging Physical state of plant (S5) Materials in contact with food (L1) Accuracy & legibility of labeling (L2) Weight control / calibration (L3) Product change over procedure (L4) Pest control programme (Q4) Chemical condition of product (Q5) Cleaning refillable containers (Q6) Water remaining in IBC's after cleaning (Q7) Warehouse storage Distribution to customer Delivery vehicle clean & free from foreign material (S6) Correct cleaning chemical used (S7) Cleaning

12. Detail of Critical Control Points

CCP No.	Parameter	Frequency	Action	Responsibility
S1	Oil free from foreign bodies	Each delivery	Reject tanker	Inspector
S2	Oil free from water	Each delivery	Reject tanker	Inspector
Q1	Quality of raw material purchased	2 years or contract start	Conform to Specification	Technical Director
Q2	Certificate of analysis	Each delivery	Not accepted without	QA staff
S3	Filter before filling	Continuous	Inspection of filters	Engineering
Q3	Maintenance of filters	Weekly	Inspection of filters	Engineering
S4	Glass controls	Each day	Visual inspection	M/c operator
S5	Physical state of plant	After maintenance	Visual inspection	Engineering & production
L1	Materials in contact with food	Contract start	Confirm specification	Buyer
L2	Accuracy & legibility of labelling	Continuous	Regular checks	QA staff
L3	Weight control / calibration	30 minutes	Weight checks	QA staff
L4	Product change over procedure	Each change of product	Pack off quantity as 'veg oil'	M/c operator
Q4	Pest control programme	Contiuous	Written contract	Technical Director
Q5	Chemical condition of product	Daily	Analysis / Organoleptic	QA staff
Q6	Cleaning refillable containers	Every container	Cleaning procedure	Cleaning team
Q7	Water remaining in IBC's after cleaning	Every container	Cleaning procedure	Cleaning team
S6	Delivery vehicle clean & free from foreign material	Each vehicle	Visual inspection	Loading staff
S7	Correct cleaning chemical used	Each clean down	Cleaning procedure	Cleaning staff

13. Food Intolerance Data:

The product is **FREE** from the following:

The product is FREE from the following: Component	Yes / No	Detail including origin
Nuts & Nut derivatives (including tree nuts)	Y	Dotail moldanig origin
(and any possible sources of cross contamination)	•	
Peanuts & Peanut Derivatives	Υ	
Seeds (Poppy, Sesame, Sunflower) & Seed Derivatives	Y	
Egg & Egg Derivatives	Y	
Milk & Milk Derivatives	Y	
Lactose	Y	
Wheat and Wheat Derivatives	Y	
Modified Starches	Y	
Mustard, mustard seed, celery, celeriac, kiwi fruit	Y	
Lupin Seed	Y	
Gluten and Gluten Derivatives	Y	
Histamine, Caffeine	Ý	
Rye, Barley & Oats or their Derivatives	Ý	
Yeast and Yeast Derivatives	Y	
Sulphites and Sulphur Dioxide	Y	
Benzoates	Y	
Artificial Sweeteners	Y	
Antioxidants BHA/BHT	Y	
	Y	
Azo and Coal Tar Dyes	Y	
Preservatives ; Natural	Y	
Preservatives ; Artificial	Y	
Additives; Natural	N	FOOD Anti foom
Additives; Artificial		E900 Anti-foam
Flavourings: Natural	Y	
Flavourings: Artificial / Nature Identical	Y	
Glutamates, MSG		
Colours: Natural	Y	
Colours: Nature Identical	Y	
Colours: Artificial	Y	
Potassium Based Salt Substitute	Y	
Genetically Modified Ingredients	Y	
Components derived from Maize	T	
- If No, are they derived from Identity Preserved Source? Or do they have a negative PCR Certificate?		
, ,	Υ	
Components derived from Soya - If No, are they derived from Identity Preserved Source?	T T	
Or do they have a negative PCR Certificate?	V	
Processing Aids derived from G.M.O.	Y	
Beef	Y	
Beef derivatives, stocks, extracts, offals, gelatin, fat, blood	Y	
Pork derivatives stocks extracts offeld goldtin for blood	Y	
Pork derivatives, stocks, extracts, offals, gelatin, fat, blood	Y	
Lamb		
Lamb derivatives, stocks, extracts, offals, gelatin, fat, blood	Y	
Fish, Crustacians or Molluscs	Y	
Fish, Crustacian or Mollusc derivatives, stocks, extracts,	Y	
offals, gelatin, fat, blood	Υ	
Beef, Pork, Lamb, Fish products or derivatives on site	l t	

14. Diet Suitability:

The product is **SUITABLE** for the following diets:-

Vegetarians	Υ	Ovo - Lacto Vegetarians	Υ
Vegans	Υ	Muslims / Halal certified	Υ*
Jewish / Kosher	Υ	Diabetics	Υ
Low Potassium	Υ	Coeliacs	Υ
Low Sodium	Υ	Organic	N

^{*}Not certified

15. Warranty:

We warrant that all food products and packaging materials supplied by Kluman & Balter Ltd:

- Shall comply in all respects with this specification, shall be clean, sound, non-injurious to health and shall be fit for the purpose for which they are intended.
- Shall comply with all aspects with the Food Safety Act 1990, and with associated regulations, and with all other relevant United Kingdom and European Union legislation, regulations, standards and codes of practice. Packaging shall comply with legal requirements for Food Contact Materials.
- Shall be of the nature, substance and quality described and shall not be presented in such a way which may mislead the purchaser.
- Shall be stored, stacked, handled and transported under suitable conditions so as to maintain safety and quality at all times.
- Shall be fully traceable back to the place and time of manufacture, and to the ingredients used.
- This specification is based on manufacturer's information, and is believed to be correct. No liability
 is accepted for errors and omissions. It may be updated or altered from time to time as new
 information becomes available.
- Customers are advised to determine the suitability of products for their specific application, and to store and use products according to this specification. It will not normally be possible to provide a life extension on products once delivered to customers' premises.
- Customers must notify any damage or defects immediately on arrival.

For and on b	pehalf of Kluman & Balter:	For and on behalf of: (customer)
Cianoturo		
Signature:		
Print Name:	Craig Stewart	
Position:	Technical Manager	
Date:		
KB code &		
Product:	509201 Rapeseed Oil	