



# SUMMARY MARKETS AND THEIR REQUIREMENTS

STDF/PG/486 PROJECT ON “IMPROVING FOOD SAFETY AND COMPLIANCE WITH SPS MEASURES TO INCREASE EXPORT REVENUES IN THE OILSEEDS VALUE CHAIN”

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# General technical requirements oilseeds

- For general requirements for import into the EU, please see <https://www.cbi.eu/market-information/oilseeds/buyer-requirements/> and [http://exporthelp.europa.eu/thdapp/display.htm?page=rt/rt\\_TechnicalRequirements.html&docType=main&languageId=EN](http://exporthelp.europa.eu/thdapp/display.htm?page=rt/rt_TechnicalRequirements.html&docType=main&languageId=EN)
- General food safety and traceability
- Not genetically modified, unless authorised by Commission
- HACCP, where possible
- PCB and dioxin compliant, [\(EC\) No 1881/2006](#)
- Pesticides
  - MRLs [ground nuts](#), [sesame seeds](#) and [sunflower seeds](#)
- Microbiological
  - Aflatoxins B1 2 µg/kg, sum B1, B2 and G2 4 µg/kg, [\(EC\) No 1881/2006](#)
  - No irradiation
- Free of foreign matter
  - No insects
  - No glass, wood and metal

# General technical requirements oils

- For general requirements for import into the EU, please see <https://www.cbi.eu/market-information/vegetable-oils/buyer-requirements> and [http://exporthelp.europa.eu/thdapp/display.htm?page=rt/rt\\_TechnicalRequirements.html&docType=main&languageId=EN](http://exporthelp.europa.eu/thdapp/display.htm?page=rt/rt_TechnicalRequirements.html&docType=main&languageId=EN)
- HACCP, where possible
- Polycyclic aromatic hydrocarbons (PAHs): The maximum limit of benzo(a)pyrene is 2.0 µg/kg. The maximum sum of PAHs is 10 µg/kg
- Microbiological
  - Aflatoxins B1 2 µg/kg, sum B1, B2 and G2 4 µg/kg, [\(EC\) No 1881/2006](#)
  - No irradiation
- PCB and dioxin compliant, [\(EC\) No 1881/2006](#)
- Heavy metals: oils are not allowed to contain more than 0.1 mg/kg of lead
- Pesticides
  - MRLs [ground nuts](#), [sesame seeds](#) and [sunflower seeds](#)
- Free of foreign matter

# Technical requirements: ground nuts

- For general requirements for import into China, please see GB/T 1532-2008.

**Table 23 Buyer requirements for peanuts**

Buyer	Other varieties (max %)	Split/Broken (max %)	Damaged (max %)	Mouldy (max %)	Impurities (per mt)	Size (in n/ounce)	Aflatoxin B1 <sup>1</sup> (in µg/kg)	Aflatoxin B1+B2+G1+G2 <sup>1</sup> (in µg/kg)	Moisture (in %)	FFA (max %)	Peroxyde (in meq/kg fat)	E. coli (in cfu/g)	Salmonella (in cfu/25g)
Aldebaran	2	4	3	1	5	80/100	2	4	6-8%	1	2	1.0	0

<sup>1</sup> Aflatoxins need to be acceptable for human consumption in Europe (B1 2 µg/kg, sum B1, B2 and G2 4 µg/kg, Commission Regulation 1881/2006)

# Technical requirements: ground nut oil (I)

- Any exports to China need to comply with relevant Chinese quality standards GB1534-2003 and GB2716.

Buyer	Product	Iodine value (I) (g/ 100g)	Saponification value (KOH) (mg/g)	Unsaponifiable matter max g/kg	Moisture and volatile substance (max %)	Insoluble impurities (max %)	Acid value (max mgKOH/g)	Peroxide value (max mmol/kg)	Solvent residue (max mg/kg)	Colour <sup>1</sup> (25.4mm)	Heating test	Soap contents (max %)	Smoke point (min in °C)
GB1534-2003	Crude	86-107	187-196	10	0.2	0.2	4.0	7.5	100				
	Pressed Grade 1	86-107	187-196	10	0.1	0.05	1.0	6.0	0	Y15, R1.5	No educt		
	Pressed Grade 2	86-107	187-196	10	0.1	0.05	1.0	6.0	0	Y25, R4.0	No educt		
	Solvent extracted Grade 1	86-107	187-196	10	0.05	0.05	0.2	5.0	0	Y15, R1.5	No educt	-	215
	Solvent extracted Grade 2	86-107	187-196	10	0.05	0.05	0.3	5.0	0	Y20, R2.0	No educt	-	205
	Solvent extracted Grade 3	86-107	187-196	10	0.10	0.05	1.0	7.5	50	-	No educt	0.03	-
	Solvent extracted Grade 4	86-107	187-196	10	0.20	0.05	3.0	7.5	50	-	Trace educt	-	-

<sup>1</sup>R means red and Y means yellow

## Technical requirements: ground nut oil (II)

Table 27 Required fatty acid profile for GB15341

Fatty acid	Chain length:unsaturation	Composition (%)
Fatty acid below 14 carbon		ND-0.1
Amomum acid	C14:0	ND-0.1
Palmitinic acid	C16:0	8.0-14.0
Palm olefine acid	C16:1	ND-0.2
Heptadecanoic acid	C17:0	ND-0.1
17 carbon 1 olefine acid	C17:1	ND-0.1
Stearic acid	C18:0	1.0-4.5
Oleic acid	C18:1	35.0-67.0
Linoleic acid	C18:2	13.0-43.0
Linolenic acid	C18:3	ND-0.3
Arachidic acid	C20:0	1.0-2.0
Peanut olefine acid	C20:1	0.7-1.7
Docosanoic acid	C22:0	1.5-4.5
Docosenoic acid	C22:1	ND-0.3
Lignoceric acid	C24:0	0.5-2.5
24 carbon 1 olefine acid	C24:1	ND-0.3

ND = not detected.

## Technical requirements: ground nut oil (III)

英文	中文	我司要求	国标	单位	限制
Avid Value	酸值	3	4	MG/G	MAX
MOISTURE AND VOLATILE MATTER	水分和挥发物	0.2	0.2	PCT	MAX
INSOLUBLE IMPURITY	不溶性杂质	0.2	0.2	PCT	MAX
PEROXIDE VALUE	过氧化值	6	7.5	MMOL/KG	MAX
RESIDENT OF SOLVENT	溶剂残留	80	100	MG/KG	MAX
Aflatoxins B1	黄曲霉毒素B1	15	20	UG/KG	MAX
LINOLENIC ACID (C18:3)	亚麻酸	0.2	0.3	PCT	MAX
OLEIC ACID (18:1)	油酸	67	35-67	PCT	MAX
BENZOAPYREN	苯并芘	10	10	UG/KG	MAX
ALDICARB	涕灭威	0.01	0.01	MG/KG	MAX
DIMETHOATE	乐果	0.05	0.05	MG/KG	MAX
DIQUAT	敌草快	0.05	0.05	MG/KG	MAX
FENAMIPHOS	苯线磷	0.05	0.05	MG/KG	MAX
FENTHION	倍硫磷	0.01	0.01	MG/KG	MAX
HALOXYFOP-METHYL AND HALOXYFOP-R	氟吡甲禾灵和高氯	1	1	MG/KG	MAX
PHORATE	甲拌磷	0.05	0.05	MG/KG	MAX
PROCYMIDONE	腐霉利	0.5	0.5	MG/KG	MAX
TRIFLURALIN	氟乐灵	0.02	0.05	MG/KG	MAX
CHLORDANE	氯丹	0.05	0.05	MG/KG	MAX
Total Arsenic	总砷(以As计)	0.1	0.1	MG/KG	MAX
PB	铅	0.1	0.1	MG/KG	MAX
ERUCIC ACID	芥酸	0.2	0.3	PCT	MAX

Figure 2 COFCO internal standard for peanut oil.



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# Technical requirements: cake

- The only buyer NuScience requires
  - Capacity to be mixed
  - Certain granular sizes
  - Absorption capacity for oils must be 6-7% of oil
  - Texture (visually assessed)
  - The main criterion is, however, feedback from clients of NuScience
- For general requirements for import into the EU, please see <https://www.cbi.eu/market-information/oilseeds/buyer-requirements/>



# Technical requirements: sesame seeds

- Aflatoxins need to be acceptable for human consumption in Europe (B1 2 µg/kg, sum B1, B2 and G2 4 µg/kg, Commission Regulation 1881/2006).
- Standard contracts under FOSFA Contract 13 may also apply for Cost, Insurance and Freight (CIF) Incoterms

<http://www.fosfa.org/contracts/>

Buyer	Variety	Purity (min %)	Other varieties (max %)	Oil content (min %)	Moisture (max %)	Admixture (max %)	Foreign matter (max %)	FFA (max %)	Mesh size 12 (min %)	Acid value	Mass (min in 1000 grains/g)	Protein (min %)
Louis Dreyfus Kenya Ltd	White	99	1	50	7	1		2				
<u>Shakumbhri Expo Impo Ltd</u>	White	99	1	48		2		1				
<u>Yme Kuiper BV</u>	Roasted natural white	99.95										
	Natural white	99.95										
	Hulled white	99.95										
	Organic	99.95										
Ting Li Dev. Co Ltd	White, black				5-6	1-2		2	60	4		
	Brown			50	5-6	1-2		2	60	4		
GB/T 11761-2006 [30]	Grade 1			51	8.0	2.0					2.2	19
	Grade 2			50	8.0	2.0					2.2	19
	Grade 3			49	8.0	2.0					2.2	19
	Grade 4			48	8.0	2.0					2.2	19
	Grade 5			47	8.0	2.0					2.2	19



# Technical requirements: sesame oil

- Material for SIO ADM needs to be winterised, which is measured by a positive cold test.
- MVO members were mainly interested in certified organic sesame oil and were looking for an internationally recognised certificate to that extent.
- Bayin tests mainly for microbiologically safe (E. coli <10 cfu/g, Listeria 0/25g, Salmonella 0/25g, Moulds <10 cfu/g, Yeasts <10cfu/g) and relies on the Irish laboratory (Eurofins) to test.
- For general requirements for import into China, please see GB/T 8233-2008

Buyer	Product	Purity (min %)	Iodine value (I) (g/ 100g)	Saponification value (KOH) (mg/g)	Unsaponifiable matter max g/kg	Moisture and volatile substance (max %)	FFA (max %)	Stearic acid content (max %)	Peroxide value (max mmol/kg)	Trans-fatty acid (max %)
SIO ADM	Pure	100	104-166	188-195	1.8	0.2	0.1	6.0	2.0	0.5

# Technical requirements: cake

- The only buyer NuScience requires
  - Capacity to be mixed
  - Certain granular sizes
  - Absorption capacity for oils must be 6-7% of oil
  - Texture (visually assessed)
  - The main criterion is, however, feedback from clients of NuScience
- For general requirements for import into the EU, please see <https://www.cbi.eu/market-information/oilseeds/buyer-requirements/>

# Technical requirements: sunflower seeds

- Aflatoxins need to be acceptable for human consumption in Europe (B1 2 µg/kg, sum B1, B2 and G2 4 µg/kg, Commission Regulation 1881/2006).
- For general requirements for import into China, please see GB/T 11764-2008.

Buyer	Product	Oil contents (min %)	Moisture	Admixture (max %)	FFA (max %)	Foreign matter (max %)	Peroxide (max meg O2/kg)	Discoloured (max %)	Fractions (max %)	Size (n/ounce)	FFA (max %)	Moulds (max cfu/g)	E. coli (max cfu/g)	Salmonella (max cfu/125g)	Listeria (max cfu/125g)
SIO ADM		44	6-9	2		4					2				
Aldebaran	Bakery				1	0.1	3	2	5	>650		10,000	100	0	0
Meprag S.r.l															

# Technical requirements: sunflower oils

- MVO members were mainly interested in certified organic sunflower oil and were looking for an internationally recognised certificate to that extent.
- For general requirements for import into China, please see GB/T 10464-2003.

Buyer	Product	Oleic acid (min %)	Iodine value (I) (g/ 100g)	Flash point (in °C)	Unsaponifiable matter max g/kg	Moisture and volatile substance (max %)	FFA (max %)	Refractive index at 25°C	Colour	Insoluble impurities (max in %)
Louis Dreyfus	Crude	77	78-88	121	1.3	0.5		1.467-1469	Y25 R2.5	0.3
<u>Mepraq S.r.l.</u>	Crude					0.5	2			

<sup>1</sup> R means red and Y means yellow

# Technical requirements: cake

- The only buyer NuScience requires
  - Capacity to be mixed
  - Certain granular sizes
  - Absorption capacity for oils must be 6-7% of oil
  - Texture (visually assessed)
  - The main criterion is, however, feedback from clients of NuScience
- For general requirements for import into the EU, please see <https://www.cbi.eu/market-information/oilseeds/buyer-requirements/>

## Questions to work on

- What are the main issues in your chain(s)?
- How well do you meet the technical requirements?
- Make a list of action points with the required time to prepare a sample of your chosen products to be tested and subsequently sent to the buyers we have identified