	UN RATIONS STANDARD		DATE: 01/04/2024
	OIL, PALM		ED No: 04
	CODE: UNSTD-COM 3127		Page: 1 of 2

1. PRODUCT NAME

OIL, PALM

PRODUCT RISK		
LOW	MEDIUM	HIGH

2. DESCRIPTION



Red Palm Oil is oil derived from the fleshy mesocarp of fruit of the oil palm (*Elaeis guineensis* Jacq.). Red palm oil is mildly processed, allowing it to retain beneficial components such as carotenes and antioxidants that are lost in traditional physical or chemical palm oil refining.

3. INGREDIENTS

3.1. ESSENTIAL INGREDIENTS

Red Palm oil is composed primarily of glycerides of fatty acids being obtained only from the fleshy mesocarp of the fruit of the oil palm.

It may contain small amounts of other lipids such as phosphatides, unsaponifiable constituents, and free fatty acids naturally present in the oil.

3.2. OTHER PERMITTED INGREDIENTS

Not permitted

4. PROCESSING

Processing

4.1. CODEX "CAC/RCP 1-1969, Rev. 4-2003; Code of Practice- General Principles of Food Hygiene including annex on HACCP systems and guidelines for application.

5. MICROBIOLOGICAL CRITERIA


FOOD SAFETY PARAMETERS

The product shall comply with any microbiological criteria established in accordance with Codex Guideline CAC/GL: 21-1997 "Principles for the Establishment and Application of microbiological criteria for food;

The product shall be free from microorganisms in amounts which may represent a hazard to health and shall be free from any substance originating from microorganisms in amounts which may represent a hazard to health.

6. CHEMICAL CRITERIA

SAFETY PARAMETERS	MAXIMUM LIMITS
Erucic acid	≤ 20 g/kg
Iron (Fe)	≤ 1.5 mg/kg
Copper (Cu)	≤ 0.1 mg/kg
QUALITY PARAMETERS	LIMITS
Matter volatile at 105°C	≤ 0.2% m/m
Insoluble impurities	≤ 0.05% m/m
Acid value	≤ 10 mg KOH/g Oil
Free fatty acid (as palmitic)	≤ 5 %
Peroxide value	≤ 15 meqO ₂ /kgoil
Saponification value	190 - 209 (mg KOH/g oil)
Iodine value	48 – 55
Unsaponifiable matter (g/kg)	≤ 12
Total Sterols	≤ 700 mg/kg

	UN RATIONS STANDARD	DATE: 01/04/2024
	OIL, PALM	ED No: 04
	CODE: UNSTD-COM 3127	Page: 2 of 2

7. PHYSICAL CRITERIA

PARAMETER	LIMITS
Appearance and colour	Naturally reddish due to the high amount of beta-carotene.
Odour or flavour	Appropriate to the product.
Texture	Pale fluid.
Foreign matter	Shall have no foreign matter and rancid odour and taste.
Storage and Transportation Temperature	15°C to 25°C

8. CONTAMINANTS

8.1. The products covered by this Standard shall comply with the Maximum Levels for contaminants that are specified for the product in General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995).

8.2. The product covered by this Standard shall comply with maximum residue limits established by Codex Alimentarius (See: CAC / MRL: 2009 Maximum residue Limits (MRLs) for pesticides).

8.3. Polycyclic Aromatic Hydrocarbons (PAH)

PAH Total (sum of benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and chrysene) ≤ 10ppb

Benzo(a)pyrene ≤ 2 ppb

9. NUTRITIONAL FACTS (Approximate values per 100 g)

NUTRIENTS	AMOUNT PER 100 g OF PRODUCT
Energy	890 kcal
Fat	100 g

10. PACKAGING

PARAMETER	LIMITS
Primary packaging	Food grade plastic/glass container or equivalent recyclable/ biodegradable packaging that maintains the integrity, sanitary and organoleptic qualities of the product and withstands the rigor of transport and handling.
Secondary packaging	Corrugated paper box or packing that protects integrity of the primary packages and withstands the rigor of transport and handling.
Primary packaging net weight	From 1 L to 3 L
Warranty at delivery location	Minimum 4 months

11. LABELLING

11.1. UNSTD-GEN-02 "UN Product Labelling"

12. OTHER REQUIREMENTS

12.1. CODEX-STAN 210-1999, "Codex Standard for named vegetable oils"

12.2. CAC/RCP 68-2009 Code of Practice for the Reduction of Contamination of Food with Polycyclic Aromatic Hydrocarbons (PAH) from smoking and direct drying processes

12.3. UNSTD-GEN-03: "UN Inspection"

12.4. UNSTD-GEN-04: "UN Certification"