

VCO STANDARDS AS APPROVED BY THE 41ST APCC SESSION IN KIRIBATI IN 2004

1. Scope

This Standard applies to virgin coconut oil.

2. Description

Coconut oil is derived from the kernel/meal/copra of the coconut (*Cocos nucifera* L.). Virgin coconut oil is obtained from the fresh and mature kernel of coconut by mechanical or natural means with or without the application of heat, which does not lead to alteration of the oil. Virgin coconut oil is suitable for human consumption in its natural state.

3. Essential Composition and Quality Factors

Identity Characteristics	Interim APCC Standards
Relative density	0.915 - 0.920
Refractive index at 40°C	1.4480 - 1.4492
Moisture % wt. max	0.1 - 0.5
Insoluble impurities per cent by mass max.	0.05
Saponification Value	250 - 260 min
Iodine value	4.1 - 11.00
Unsaponifiable matter % by mass. max.	0.2 - 0.5
Specific gravity at 30 deg./ 30 deg. C	0.915 - 0.920
Acid Value max.	0.5
Polenske Value min	13
GLC Ranges of Fatty Acid Composition (%)	
C 6:0	0.4 - 0.6
C 8:0	5.0 - 10.0
C 10:0	4.5 - 8.0
C 12:0	43.0 - 53.0
C 14:0	16.0 - 21.0
C 16:0	7.5 - 10.0

C 18:0	2.0 - 4.0
C 18:1	5.0 - 10.0
C 18:2	1.0 - 2.5
C 18:3 - C 24:1	< 0.5
Quality Characteristics	
Colour	water clean
Free Fatty Acid	0.5%
Peroxide Value	3 meq/kg oil
Total Plate Count	< 10 cfu
Odour and Taste	Free from foreign and rancid odour and taste
Contaminants	
Matter volatile at 105°C	0.2 %
Iron: (Fe)	5 mg/kg
Copper	0.4 mg/kg
Lead	0.1 mg/kg
Arsenic	0.1 mg/kg

4. Food Additives

None Permitted

5. Hygiene

It is recommended that the product be prepared in accordance with the GMP and HACCP standards.

6. Labelling

The name of the food on the label shall be "Virgin Coconut Oil.". The provisions of the General Standard for the labeling of Prepackaged Foods (CODEX STAN 1 – 1985 (Rev. 1-1991)) shall apply.

7. Methods of Analysis and Sampling

Based on Codex Alimentarius (Volume 13).