



TECHNICAL DATA

A division of Spectrum Organic Products, Inc

Product Name: **Palm Shortening, Organic, Tender Bake (32/33)**

Source: **Palm Fruit Oil (PFO)** from the spineless palm tree (*Elaeis guineensis*)
(PFO may also be called **Palm Oil** in reference materials)

Manufacturing: The fruit of the palm is separated from the kernel, or pit, then the fruit is expeller pressed, organically bleached and deodorized. 50 ppm citric acid as a processing aid.

Nominal Melting Point 32 - 33 °C. Spectrum's Tender Bake shortening is approximately 45% saturated and 55% unsaturated fat, and contains no transomerized fats which are found in hydrogenated oils. It is used in a variety of baking applications where a butter or margarine texture is desired, such as soft cookies and muffins.

<u>Property</u>	<u>Typical Analysis</u>	<u>Method</u>
Appearance	Off-white solid, clear when melted	Observation
Organoleptic	Bland Oil	Sensory Evaluation
Color (Lovibond)	≤3.5R	AOCS Cc 13b-45, 5¼ cell
Moisture	≤0.1%	AOCS Ca 2e-84
Specific Gravity	0.890 to 0.910	AOCS Cc 10a-25 @ 20°C
Free Fatty Acid	≤0.2%	AOCS Ca 5a-40, as % Oleic Acid
Peroxide Value	≤3.0	AOCS Cd 8-53 as meq/kg
Iodine Value	50 to 56	AOCS Cd 1d-92
Smoke Point	230 °C (446 °F)	AOCS Cc 9a-48
Melting Point	32 to 34 deg C (90 to 93 deg F)	AOCS Cc 1-25

Typical Fatty Acid Profile (%) AOCS Ce 1e-91

C12:0	Lauric	Trace
C14:0	Myristic	1 to 2
C16:0	Palmitic	38 to 45
C18:0	Stearic	3 to 5
C18:1	Oleic	38 to 41
C18:2	Linoleic	9 to 12
C18:3	Linolenic	≤1

Solid Fat Content (NMR)

Temperature	Percent Solids
10°C (50°F)	34 – 38
20°C (68°F)	10 – 12
30°C (86°F)	6 – 8
35°C (95°F)	1 – 3
40°C (104°F)	< 1

Packaging and Storage: Store in a cool dry place (50 to 68 degrees F optimum) away from direct sources of sunlight, heat and oxidizers. Properly stored unopened containers have an expected shelf life of 18 months. Allow to stand at 70° F for 6 hours before using.

<u>Item Number</u>	<u>Size</u>	<u>Container Description</u>
130892	33	Packing is in 33 lb cube. Food grade polyethylene bag-in-box. 60 units per pallet.

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