

Notice Calling for suggestions, views, comments etc from stakeholders on the draft notification regarding Revision of Standards of Kachi Ghani Mustard Oil, Palm oil with regard to melting point, Vanaspati and New Standards of Palm Stearin; Palm Kernel Olein; Palm Kernel Stearin; Superolein; Avocado Oil; Inclusion of Peroxide Value in standards of all vegetable oils in Food Safety and Standards (Food Product Standards and Food Additives Regulation, 2011.

File No. Stds/O&F/Notification(7)/FSSAI-2017.- In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011, in regulation 2.2,

(I) in sub-regulation 2.2.1 relating to OILS,

(a) in clause (6) relating to Rapeseed oil (toria oil) mustard oil (sarson ka tel), after the sentence “Test for Argemone oil shall be negative” the following provision shall be inserted namely-

“The oil shall be labelled as Kachi Ghani if the content of Natural essential oil as allyl isothiocyanate is in the range of 0.25-0.60%.”

(b) in clause 19 relating to Palm oil, in the standards specified therein, for the entry “Melting point (capillary slip method)”, the following entry shall be substituted, namely-

“Melting point (capillary slip method) Not more than 39° C”;

(c) after clause 24 relating to blended edible vegetable oil, the following clauses shall be inserted, namely-

“25. Avocado oil

(1) Description

Avocado oil means the oil obtained from the avocado fruit (*Persea Americana*). It shall be clear, free from rancidity, suspended or other foreign matter, separated water, added colouring or flavouring substances.

It shall conform to the following specifications:

Refractive index at 40°C	1.4650 – 1.4740
Saponification value	177 - 198
Iodine value	63 - 95

Unsaponifiable matter	Not more than 12.0% by weight
Acid value	Not more than 2
Peroxide Value	Not more than 15 milli equivalent of Oxygen/ Kg fat
Test for Argemone oil shall be negative.	

26. Palm stearin

(1) Description

Palm stearin is the high-melting fraction derived from the fractionation of palm oil.

It shall conform to the following specifications:

Refractive index at 60°C	1.447-1.452
Saponification value	193-205
Iodine value	Not more than 48
Unsaponifiable matter	Not more than 0.9 per cent
Slip point or Slip melting point °C	Not less than 44
Acid Value	Not more than 0.5
Peroxide Value	Not more than 10 milliequivalents of active oxygen /Kg Oil

Test for Argemone oil shall be negative.

27. Palm kernel stearin

(1) Description

Palm kernel stearin is the solid fraction derived from fractionation of palm kernel oil.

It shall conform to the following specifications:

Refractive index at 40°C	1.449-1.451
Saponification value	244-255
Iodine value	4-8.5
Unsaponifiable matter	Not more than 1.5 per cent
Acid Value	Not more than 0.5
Peroxide Value	Not more than 10 milliequivalents of active oxygen /Kg Oil

Test for Argemone oil shall be negative.

28. Palm kernel olein

(1) Description

Palm kernel olein is the liquid fraction derived from fractionation of palm kernel oil

It shall conform to the following specifications:

Refractive index at 40°C	1.451-1.453
Saponification value	231-244
Iodine value	20-28
Unsaponifiable matter	Not more than 1.5 per cent
Acid Value	Not more than 0.5
Peroxide Value	Not more than 10 milliequivalents of active oxygen /Kg Oil

Test for Argemone oil shall be negative.

29. Palm Superolein

(1) Description

Palm Superolein is a liquid fraction derived from palm oil produced through a specially controlled crystallization process to achieve an iodine value of 60 or higher.

It shall conform to the following specifications:

Refractive index at 40°C	1.463-1.465
Saponification value	180-205
Iodine value	Not less than 60
Unsaponifiable matter	Not more than 1.3 per cent
Slip point	Not more than 19.5°C
Acid Value	Not more than 0.5
Peroxide Value	Not more than 10 milliequivalents of active oxygen /Kg Oil

Test for Argemone oil shall be negative.

(II) in sub-regulation 2.2.6 relating to 'HYDROGENATED VEGETABLE OILS',-

(i) clause 1 relating to Vanaspati,

(A) in the opening paragraph, for the words "Vanaspati shall be prepared from one or more of the following vegetable oils:

- (a) Coconut oil
- (b) Cotton-seed oil
- (c) Dhupa fat
- (d) Groundnut oil
- (e) Kokum fat
- (f) Linseed oil

- (g) Mahua oil
- (h) Maize (Corn) oil
- (i) Mango kernel fat
- (j) Mustard/Rape-seed oil
- (k) Niger-seed oil
- (l) Palm oil
- (m) Phulwara fat
- (n) Rice bran oil
- (o) safflower (Kariseed) oil
- (p) Salseed oil (up to 10%)
- (q) Sesame oil
- (r) Soyabean oil
- (s) Sunflower oil
- (t) Watermelon seed oil
- (u) Vegetable oils imported for edible purposes]
- (v) Palm Stearin;”

the following provision shall be substituted, namely-

“Vanaspati shall be prepared from any of the edible vegetable oils whose standards are prescribed under these regulations or any other edible vegetable oil with prior approval of the Food Authority.”

(B) in sub-clause (vi), the paragraph starting with the words “Provided that imported crude” and ending with the words “for edible consumption” shall be omitted;

(C) for the item (d) of sub-clause (vii), the following provision shall be substituted, namely-

“Free Fatty acids (as palmitic acid), percent by mass: Not more than 0.25.”

(III) after sub-regulation 2.2.6 relating to Hydrogenated vegetable oils, the following sub regulation shall be inserted, namely-

“2.2.7 FATTY ACID COMPOSITION:

The oils and fats covered under sub-regulation 2.2.1 from clause (25) to clause (29) shall comply with the fatty acid composition of the oils and fats specified in the table, namely:-

Table
Fatty Acid Composition of vegetable oils as determined by gas liquid chromatography
(expressed as percentage of total fatty acids)

Fatty acid	Palm Stearin	Palm Kernel Stearin	Palm Kernel Olein	Palm superolein	Avocado Oil
C6:0	ND	ND-0.7	ND-0.2	ND	ND
C8:0	ND	2.9-6.3	1.3-3.0	ND	ND
C10:0	ND	2.7-4.5	2.4-3.3	ND	ND
C12:0	0.1-0.5	39.7-47.0	52.0-59.7	0.1-0.5	ND
C14:0	1.0-2.0	11.5-15.5	20.0-25.0	0.5-1.5	0.0-0.3
C16:0	48.0-74.0	6.2-10.6	6.7-10.0	30.0-39.0	7.0-35.0
C16:1	ND-0.2	ND-0.1	ND	ND-0.5	2.0-16.8
C17:0	ND-0.2	ND	ND	ND-0.1	0.0-0.3
C17:1	ND-0.1	ND	ND	ND	0.0-0.3
C18:0	3.9-6.0	1.7-3.0	1.0-3.0	2.8-4.5	0.0-1.5
C18:1	15.5-36.0	14.4-24.6	4.1-8.0	43.0-49.5	36.0-80.0
C18:2	3.0-10.0	2.4-4.3	0.5-1.5	10.5-15.0	6.0-21.2
C18:3	ND-0.5	ND-0.3	ND-0.1	0.2-1.0	0.0-3.0
C20:0	ND-1.0	ND-0.5	ND-0.5	ND-0.4	0.0-0.5
C20:1	ND-0.4	ND-0.2	ND-0.1	ND-0.2	0.0-0.2
C20:2	ND	ND	ND	ND	ND
C22:0	ND-0.2	ND	ND	ND-0.2	ND
C22:1	ND	ND	ND	ND	ND
C22:2	ND	ND	ND	ND	ND
C24:0	ND	ND-0.7	ND	ND	0.0-0.1
C24:1	ND	2.9-6.3	ND	ND	ND
C18:1t	-	-	-	-	ND
C18:2 t + C18:3 t	-	-	-	-	ND

ND-not detectable, defined as $\leq 0.05\%$

(IV) after sub-regulation 2.2.7 relating to the Fatty Acid Composition, the following sub-regulation shall be inserted, namely-

“2.2.8. The Peroxide Value of various categories of oils and fats shall be as follows-

- (i) Refined oils up to 10 milliequivalents of active oxygen/kg oil (except olive oil)
- (ii) Cold pressed and virgin oils up to 15 milliequivalents of active oxygen/kg oil(except olive oil)
- (iii) Cold pressed fats and oils up to 15 milliequivalents of active oxygen/kg oil (except olive oil)
- (iv) Virgin olive oils ≤ 20 milliequivalents of active oxygen/kg oil
- (v) Refined olive oil ≤ 5 milliequivalents of active oxygen/kg oil
- (vi) Olive oil ≤ 15 milliequivalents of active oxygen/kg oil
- (vii) Refined olive-pomace oil ≤ 5 milliequivalents of active oxygen/kg oil
- (viii) Olive-pomace oil ≤ 15 milliequivalents of active oxygen/kg oil
- (ix) Other fats and oils up to 10 milliequivalents of active oxygen/kg oil”.