

# SEA RAPESEED – MUSTARD CONCLAVE – 2017

## Impact of Prospective Regulatory Changes on Vegoils

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Convener SEA Regulatory Committee

# Mustard & Bollywood



# Agenda

- **FSSAI requirements**
- **Regulatory changes**
- **Way forward**

# Historical Evidence

- Arch logical study at Harappa BC-3000 ( 5000 Yrs Back) shown presence of Mustard as edible grain/spices
- Mention of Mustard in Gautam Buddha – BC 350
- According to the Hadith, Muhammad said that he who has in his heart the weight of a mustard seed of pride would not enter Paradise
- Mention in Bible – By Jesus
  - How Kingdom of God should be? It is like Mustard seed – small in size but having potential to cultivate big plant – Ref Luke-17.6-10

# Mustard Oil Specification as per FSSAI

## 2.2.1. (6) Rape-seed oil (toria oil) mustard oil (sarson ka tel)

**Definition:** the oil expressed from clean and sound mustard seeds, belonging to the compestris, juncea or napus varieties of Brassica.

## 2.2.1. (7) Rapeseed or mustard oil-low erucic acid

**Definition:** the oil obtained from clean and sound, low erucic acid oil bearing seeds of rapeseed belonging to compestris, juncea, or napus varieties of Brassica by the method of expression or solvent extraction.

It shall contain not more than 2 % erucic acid (as % of total fatty acids)

**Free from rancidity, suspended matter, seperated water, added colouring, flavouring agent or mineral oils**

# Mustard Oil Specification as per FSSAI

Parameters	Mustard Oil	Low Erucic Mustard Oil
BR reading at 40°C OR Refractive index at 40°C	58.0 to 60.5 OR 1.4646 to 1.4662	58.6 to 61.7 OR 1.465 to 1.467
Saponification value	168 to 177	105 to 126
Iodine value	96-112	105 to 126
Polybromide test	Negative	182-193
Unsaponifiable matter	NMT 1.2% by weight	NMT 20g/kg
Acid value	NMT 6.0	NMT 6.0
Bellier test (Turbidity temperature - Acetic acid Method)	23.0°C to 27.5°C	NMT 19°C
Test for Argemone Oil	Negative	Negative
Test for Hydrocyanic Acid	Negative	Passes test

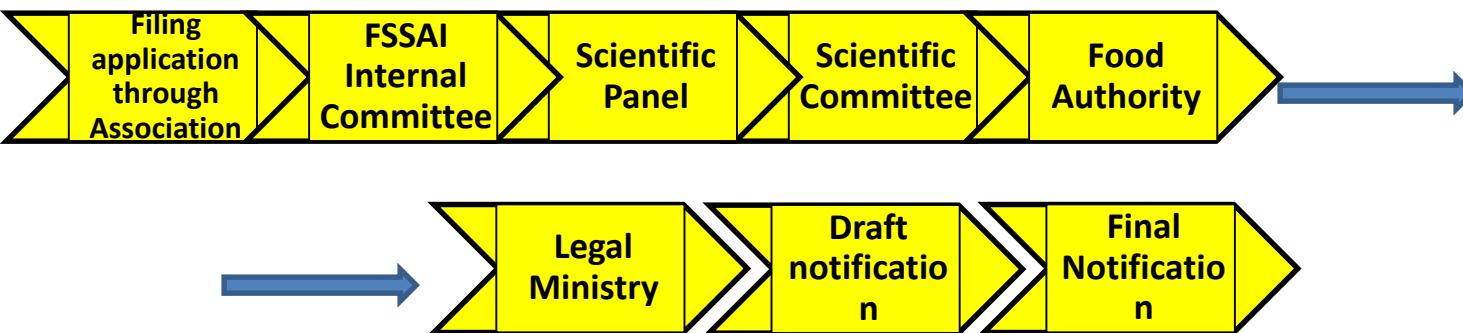
## **Recent Updates**

# Regulatory Changes - Flow

## Flow of Regulatory Process at FSSAI

8 step process at different levels of Authority once application is filed

Timeline required for any regulatory process : Any thing from 1 year to 4 years



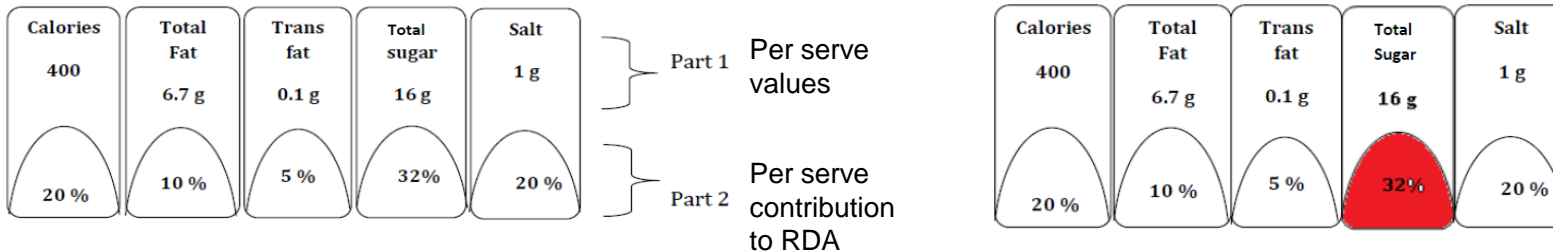


# Major Changes

## FSSAI

### Draft Labelling Regulations:

- Top 8 allergens identified and their labelling will be mandatory if present
- Expiry date in MMM/YY format introduced with BBD as optional
- Nutrition table per 100g/ml and per serving RDA%.
- Display of Nutritional information for vending machine
- Calories, Total Fat, Sugar, Salt and Trans fat to be labelled on FOP as per serve and %RDA
- HFSS foods to follow a Red color coding on FOP



Entire Industry is worried for front of the pack HFSS.

# Major Changes

## FSSAI

### Draft Claim Regulations

Procedure for Approval of Health Claims and Redressal of non-compliance has been detailed

Monogram of Approved Disease Risk Reduction Health Claims has been created

Criteria for Nutrition Claims have been specified

**Trans fat free definition : Below 0.2 % per 100 g**

Positive list of Health Claims for Fortified Food Articles has been listed

All claims based directly on product must be supported with CLINICAL STUDY

Clinical study must satisfy defined criteria

Higher scrutiny of advertisements for misleading claims

Claims and disclaimers to be provided in the same field of vision

# Recent changes

Fatty acid	Mustard-seed oil	Rapeseed Oil	Rapeseed oil (low erucic acid)
C6:0	ND	ND	ND
C8:0	ND	ND	ND
C10:0	ND	ND	ND
C12:0	ND	ND	ND
C14:0	ND-1.0	ND-0.2	ND-0.2
C16:0	0.5-4.5	1.5-6.0	2.5-7.0
C16:1	ND-0.5	ND-3.0	ND-0.6
C17:0	ND	ND-0.1	ND-0.3
C17:1	ND	ND-0.1	ND-0.3
C18:0	0.5-2.0	0.5-3.1	0.8-3.0
C18:1	8.0-23.0	8.0-60.0	51.0-70.0
C18:2	10.0-24.0	11.0-23.0	15.0-30.0
C18:3	6.0-18.0	5.0-13.0	5.0-14.0
C20:0	ND-1.5	ND-3.0	0.2-1.2
C20:1	5.0-13.0	3.0-15.0	0.1-4.3
C20:2	ND-1.0	ND-1.0	ND-0.1
C22:0	0.2-2.5	ND-2.0	ND-0.6
C22:1	22.0-50.0	> 2.0-60.0	ND-2.0
C22:2	ND-1.0	ND-2.0	ND-0.1
C24:0	ND-0.5	ND-2.0	ND-0.3
C24:1	0.5-2.5	ND-3.0	ND-0.4

The oils and fats covered under the regulation 2.2 shall comply with the fatty acid composition of the respective oils and fats given in the tables

# Recent Changes

**Gazette for inclusion of TPC in cooking Oil :-** This regulation prescribes the limit for Total Polar Compounds (TPC) to be maximum 25% beyond which the vegetable oil is not suitable for use.

- Shall come into force from July 2018

**Gazette Notification for Amendments in Standards of Oil :-**

- New standard of Virgin Coconut Oil, Peanut Butter, Cocoa Butter
- Revision in Standards of Flaxseed Oil, Palm Oil, Palm Kernel Oil

**Gazette Notification :-**

- Use of exotic fat such as shea, illipe, etc. in chocolates upto 5%

# Proposed Changes - Draft

- **Mustard Oil** can be labeled as **“Kachi Ghani”** if the content of allyl isothiocyanate is not less than 0.2% by wt.
- In the category **“Palm Oil”**, the melting point is amended to NMT 39°C
- Insertion of **new standards “Avocado Oils”, “Palm Stearin”, “Palm Kernel Stearin”, “Palm Kernel Olein”, “Palm Superolein” and their fatty acid composition**
- **Definition of “Vanaspati” is modified** - allowing the use of any standardized edible vegetable oil, however non-standardized oil can be used only after seeking approval from Authority. Manufacturing of vanaspati is no more restricted to hydrogenation process.
- Limitation set on use of imported crude palm oil and fractions for manufacture of vanaspati only is removed.

# Proposed Changes - Draft

- FFA requirement is replaced with Acid value for vanaspati. The limit set as NMT 0.6.
- **Peroxide value for various oils** (refined, cold pressed, virgin) is set forth.
- Bellier Test requirement is omitted from all the oils & fats.
- **Revision in the definition of “Refined Vegetable Oil”** - Degumming process was allowed without any mention of the methods however the methods are now defined which are chemical method (using phosphoric/ citric acid) and enzymatic method
- Acid value of refined vegetable oil is revised to 0.6
- **In refined vegetable oil, Trans fat limit set as 5% and thereafter 2 years, it should be 2%.**

# Proposed Changes - Draft

- **Labelling of Blended oil :**

- The font size of specified particulars made on every pack of solvent extracted oil or de-oiled meal or edible flour should be min 3mm.
- In case of edible oil (blended/ refined) and edible fat (margarine/ vanaspati/ fat spread) packages, the declarations “Net Quantity” & “Free from Argemone Oil” should be made in font size of min 3mm.
- The font size of “Blended Edible Vegetable Oil” made in the label declaration pertaining to admixture shall be min 5 mm and in case of packages more than 1 litre, it should be 10mm.

# Proposed Changes - Draft

- Revision in the definition of “Refined Vegetable Oil” - Degumming process was allowed without any mention of the methods however the methods are now defined which are chemical method (using phosphoric/ citric acid) and enzymatic method
- Standards for Imported Sunflower seed oil are omitted. While Acid value limit is set for imported sunflower seed oil
- New standard of Chia oil is inserted
- Provision for permission of flavor addition in interesterified vegetable fat/oil is removed
- Trans fat limits are inserted for “2.2.3 Partially Hydrogenated Soyabean oil”. It is limited to 5% by weight and after 2 years, it should be less than 2% by weight.
- The same provision of trans fat is added for “2.2.5 Margarine and Fat spread” Provision for permission of flavor addition in interesterified vegetable fat/oil is removed
- Trans fat limits are inserted for “2.2.3 Partially Hydrogenated Soyabean oil”.



# Proposed Changes - Draft

- Draft Notice related to **restriction on use of diacetyl** as flavouring substance in oils & fat (dated : 16<sup>th</sup> May 2018)
  - This is an addition of new clause 7 under sub-regulation 2.3.15 of FSSRs (Prohibition & Restriction on sales).
  - This states that use of diacetyl as flavouring substance is prohibited in oils or fats

Removal of Boudouin Test requirement for Blended Oil

Notice issued for comments on mandatory AGMARK for Blended Edible Vegetable Oil


# New Agendas for Mustard

<p>Revision of RI, BR and IV for mustard Oil</p>	<p>2.2.1 (6) Rapeseed/Mustard oil : Refractive Index 1.4646 to 1.4662 Butyro-refractometer reading 58.0 to 60.5 Iodine value 96-112</p>	<p>1. Revise the refractive index @ 40 C from 1.4646 - 1.4662 to 1.461-1.469 (in line with Codex) 2. In conjunction with increase in range of refractive index, the upper limit for B.R should also be increased from 58-60.5 to 58 -65.0 3. Iodine Value is in direct relation with refractive index( RI) so that also needs revision from 96-112 to 98-114 as per oil trend of last 10 yrs.</p>
<p>Standard for KGMO (Kachi Ghani Mustard Oil)</p>	<p>No current standards</p>	<p>1. Introduction of a standard for KGMO: a. Inclusion of Allyl isothiocyanate as a key factor responsible for pungency of KGMO. Proposed limit : 0.1 to 0.6 This has been derived from 1. Agmark standard (0.1 to 0.6 for raw grade II) 2. BIS (0.1 to 0.6 for raw grade II)  b. Rest all parameters shall be similar to Mustard Oil. FSSR 2.2.1 (6) which has mention of 'Compestris, juncea or napus varieties of brassica'</p>

# Legal Metrology

- **Amendment in Font size requirements for**
  - Net Quantity,
  - MRP,
  - Best before date,
  - Consumer Panel
- **Timeline extended** for its implementation : 31.07.2018 - Using stickers, tags, online printing etc.

# Old PFA Cases



F. No. P. 15017/120/2016-FSSAI/Legal  
Food Safety and Standards Authority of India  
FDA Bhawan, Kotla Road, New Delhi – 110002

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Dated, the 8<sup>th</sup> December 2017

**ORDER**

**Subject: Cases against FBOs for violation of old standards of food products even though they are in conformity with the new/revised standards-reg.**


All food articles manufactured and / or sold in India are required to be in conformity with the provisions of the Food Safety and Standards Act, 2006 (FSS Act) and its various regulations. Before the FSS Act came into operation, food products were required to be in conformity with the provisions of the Prevention of Food Adulteration Act, 1954 and Rules & Regulations framed thereunder. Accordingly, food products for which standards and/ or other such provisions do not exist, are not allowed to be manufactured, imported or sold.

During the last few years, a large number of new standards have been framed by the Food Safety and Standards Authority of India. It has also amended standards for several food products, keeping in view the scientific evidence for ensuring an appropriate level of safety. While the standards have become more rigorous in respect of some food products, in some other cases these have become less stringent and/ or with relaxed norms in comparison to standards/ norms prescribed earlier.

The field machinery tasked with the responsibility of ensuring food safety may have lodged cases against some FBOs for violation of the old standards even though the impugned products may now be in conformity with the new/ revised standards. It may be appreciated that such revision of standards has taken place after taking into account all scientific evidence required to ensure appropriate level of protection of human life and health. Engaging of State machinery in pursuing such cases not only diverts the scarce resources of the government but also burdens the judicial system.

Accordingly, Commissioners of Food Safety, are advised to withdraw, or, at least, not pursue, cases for violation of old norms and standards unless these are still not in conformity with the new/ revised standards so that avoidable harassment of FBOs could be prevented. The result of this exercise may please be appraised to FSSAI from time to time.

This issues with the approval of the Competent Authority.

  
(Raj) Singh  
Head (Legal)  
Tel no.- 011- 23220997

To,  
Commissioners of Food Safety,  
All States/ UTs.

- FSSAI has taken initiative to close the old PFA cases
- All misbranding and sub standard cases to be compounded
- Gujarath FDA has compounded 1500 cases so far
- Kindly use this opportunity

# Watch For

- **Maharashtra has banned plastic bags- others to follow**
- **Major companies such ITC, RB, Nestle, PepsiCo, Hyundai** have pledged to reduce usage of plastics in their business and enhance recycling on World Environment Day
- **PepsiCo** will pilot first ever plant based, 100 percent compostable packaging for Lay's and Kurkure snack products in India
- **Cement Manufacturers Association** pledge to minimize single use plastic and will enhance the potential of kilns to utilize 12 million tones of plastics
- Hyundai Motor India announced plans to reduce the usage of plastics across office, dealers and service networks

# Other Important Activities

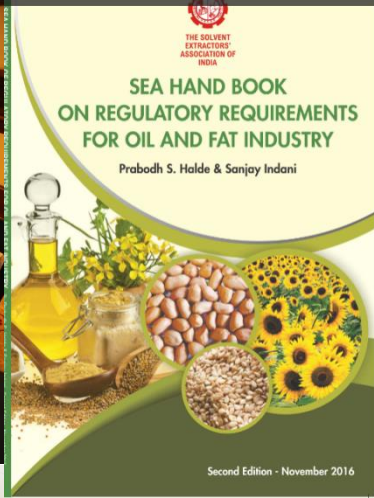
## Standard Review group

1. The group has forwarded the 28 agenda file to FSSAI
2. 2. Other agendas to work on separately:
  - a) More than one oil for blending
  - b) AGMARK issue
- **Voluntary Fortification activity**
  1. The deadline given for the first phase to industries is 31<sup>st</sup> March 2017
  2. 2. To represent effectively about restricting the scope to refined oils only
- **New FSMS document**
  1. New FSMS being designed for Oil industry
  2. The document will consist of three sections :
    - a)Oilseed crushing
    - b) Oil manufacturing
    - c) Oil Storage and transport
  3. The document is still under process.

# Fostac

- SEA is partnering with FSSAI
- SEA has conducted 3 TOT and 1 NLRP program with FSSAI
- FoSTaC is compulsory for license renewal
- Need to conduct supervisory program for oils and fat – PI give names and date

# Advocacy @ SEA/AFST



Codex participation  
Leadership position in association  
Partnership with regulator  
4 Books  
10 seminars



# Conclusion

- Regulatory changes are dynamic
- Need to engage with regulators to understand the changes
- Consumers are empowered through social media
- Compliance is hygiene
- Cost of regulatory (non compliance) will be high



**Thank You Any Query.....**

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