



# PALM PRODUCTS - FSSAI STANDARD, REGULATION LICENSING & FOOD SAFETY



## **AATMANIRBHAR BHARAT**

PM Formalisation of Micro Food Processing Enterprises Scheme (PM FME Scheme)

## **FSSAI**

- FSSAI Food Safety and Standard authority of India is a regulatory body responsible for supervising the safety & standard of food business across the nation.
- ➤ To run food and food related business in India, FSSAI certificate or FSSAI license is mandatory. In today's world, as people prefer certified food consumption, FSSAI license can provide the food business with legal benefits and expansion scope. Not to forget it builds goodwill and trust, ensures food being wholesome, create consumer awareness.



## **FSSAI REGISTERATION**

- Every petty Food Business Operator shall register themselves with the Registering Authority by submitting an application for registration.
- The petty food manufacturer shall follow the basic hygiene and safety requirements provided Schedule 4.
- The registration shall be granted by the Registering Authority after being satisfied with the safety, hygiene and sanitary conditions of the premises.
- The Registering Authority or any officer or agency specifically authorized to carry out food safety inspection of the registered establishments at least once in a year.

## **TYPES REGISTERATION**

#### 1. BASIC REGISTRATION:

✓ Done for those food business operation which have annual turn over less or equal to than 12 lakh.

#### 2. STATE REGISTRATION:

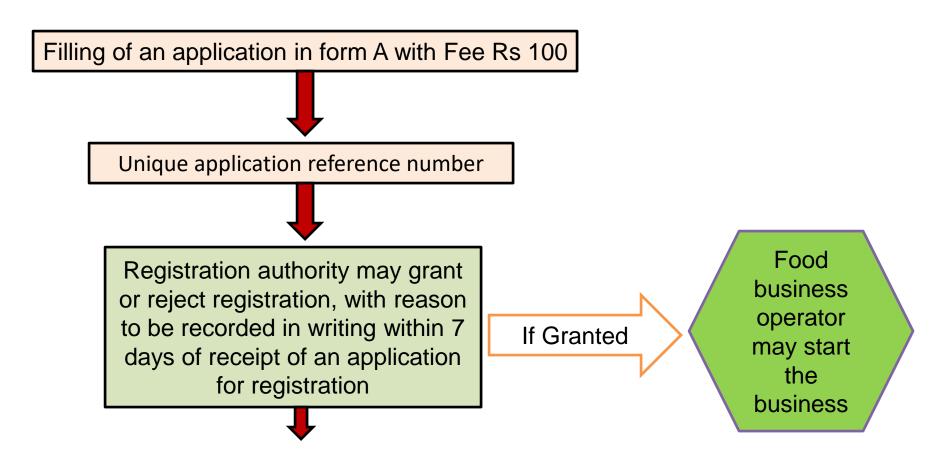
✓ Done for those food business operation which have annual turn over between 12 lakh to 20 crore.

#### 3. CENTRAL REGISTRATION:

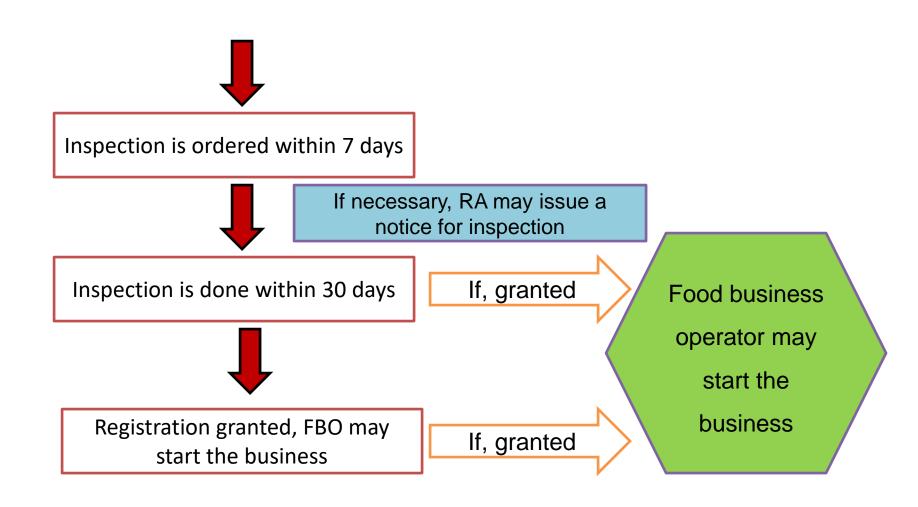
✓ Done for those food business operation which have annual turn over more than 20 crore.

## **BASIC REGISTRATION**

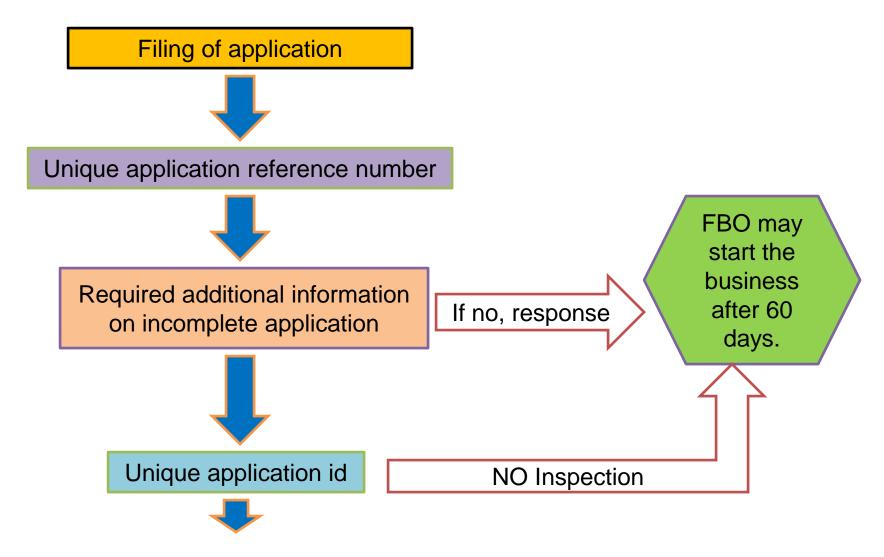
Every Food Business operator shall register themselves with the registration authority by submitting an application along with a fee of Rs 100



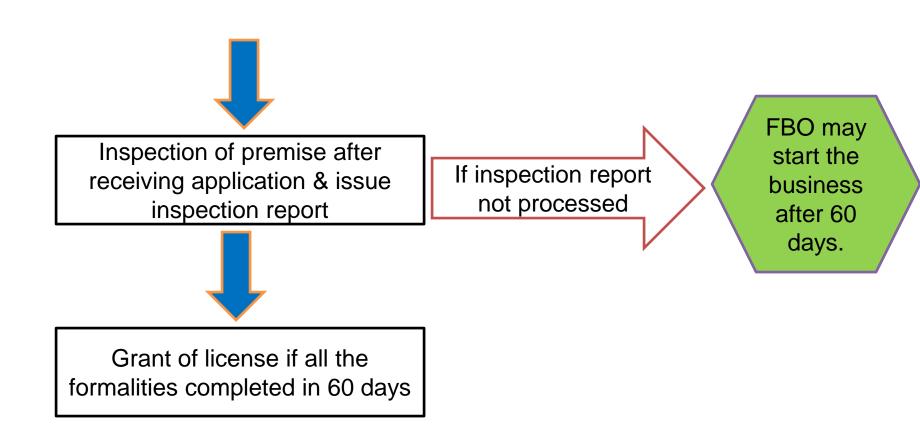
## **BASIC REGISTRATION**



## **CENTRAL/STATE REGISTRATION**



## **CENTRAL/STATE REGISTRATION**



## **FEE STRUCTURE**

Types/ Category	Registration -1 year	Central -1 year	Railways -1year
New application	₹ 100	₹7500	₹2000
Renewal application	₹ 100	₹7500	₹2000
License/certificate modification	₹ 100	₹7500	₹2000
Duplicate certificate/ License	10% of the applicable certificate fee	10% of the applicable certificate fee	10% of the applicable certificate fee

## **MODIFICATION OF LICENSE**

 Food business operator are required to operate any change in the business to Food Safety Standard authority of India (FSSAI) within a reasonable time.

 Any changes related to kind of business, scale of production, products category or formulation etc. should follow the regulation.

 Once the FSSAI License or registration (FORM C) has been granted, any change required in the same requires filling application for the modification of FSSAI License or Registration.

## RENEWAL OF FSSAI LICENSE

- The FSSAI license is essential to commence the food business, similarly it
  is imperative to renew the license. The license is issued for a validity of 1
  year or 5 year, so the business must apply for renewal 30 days prior to the
  expiry of current license.
- The FLR is utilized in five regional office for the issue of licenses and entitlement. They are:
- 1. North Region New Delhi
- 2. Eastern Region Kolkata
- 3. North Easter Region Guwahati
- 4. Western Region Mumbai and Kerala
- 5. Southern Region Chennai

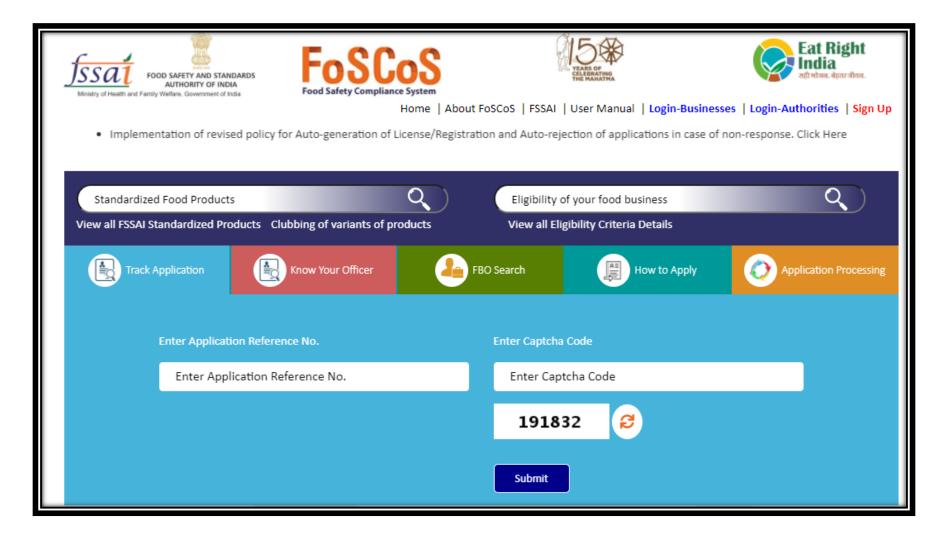
## FoSCoS-FSSAI

- FoSCoS- Food Safety and Compliance System is a unified application built on open source platform, with enhanced features, easily configurable and has architectural capability to meet the envisaged functionalities and modules.
- Overall objectives of FoSCoS are as follows:
- ✓ Transform from the present FLRS which is only a licensing platform to a central food safety compliance regulatory platform.
- ✓ Build a technically advanced integrated application to achieve interoperability with other applications, capable of higher user traffic, and has potential for future upgrades and functionalities.

## FoSCoS-FSSAI

- ✓ Enhance user performance of the application and make application process simpler and efficient to promote ease of doing business amongst FBOs.
- ✓ Achieve minimal physical documentation and streamline business process flows for FBOs for online application.
- ✓ Achieve and enable the application to have standardized product approach rather than text box approach for manufacturers.
- ✓ Enable application to seed business specific details such as CIN No., PAN No. and GST No. to ensure 360o profiling and validation of FBOs.

## FoSCoS-FSSAI



## **FOOD CATEGORY SYSTEM**

Food Category Name	Food Sub Category Name	Product Name	FSSR Number
02 - Fats and oils, and fat emulsions	02.1 - Fats and oils essentially free from water	Palm oil[02.1.2]	2.2.1(19)
02 - Fats and oils, and fat emulsions	02.1 - Fats and oils essentially free from water	Palmolein [02.1.2]	2.2.1(20)
02 - Fats and oils, and fat emulsions	02.1 - Fats and oils essentially free from water	Palm kernel oil[02.1.2]	2.2.1(21)
02 - Fats and oils, and fat emulsions	02.1 - Fats and oils essentially free from water	Refined Palm Oil[02.1.2]	2.2.1(16)(xvii)

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02 - Fats and oils, and fat emulsions	02.1 - Fats and oils essentially free from water	Refined Palm Kernel Oil[02.1.2]	2.2.1(16)(xix)

Refined vegetable oil means any vegetable oil which is obtained by expression or solvent extraction of vegetable oil bearing materials, deacidified with alkali and/or physical refining and/or by miscella refining using permitted foodgrade solvents followed by bleaching with absorbent earth and/or carbon and deodourised with steam. No other chemical agent shall be used. The name of the vegetable oil from which the refined oil has been manufactured shall be clearly specified on the label of the container. In addition to the under-mentioned standards to which refined vegetable oils shall conform to the standards prescribed in these regulations for the specified edible oils shall also apply except for acid value which shall be not more than 0.5. Moisture shall not exceed 0.10 percent by weight.

❖ Palm oil means the oil obtained from fleshy mesocarp of fruits of the oil palm (Elaeis Guinensis) tree by the method of expression or solvent extraction. It shall be clear, free from rancidity, suspended or other foreign matter, separated water, added colouring and flavouring substances or mineral oil. It shall conform to the following standards, namely:-

Butyro-refractometer	
reading at 50 °C	35.5 - 44.0
Or	
Refractive Index at 50 °C	1.4491-1.4552
Melting point (capillary slip method)	Not more than 37 °C
Iodine value(Wij's method)	45-56
Saponification value	195-205
Unsaponifiable matter	Not more than 1.2 per cent
Acid value	Not more than 10.0

- ❖ Indigenously produced raw Palm Oil obtained by method of expression may be supplied for human consumption as such provided acid value is not more than 6.0 But palm oil imported into the country or produced by solvent extraction shall be refined before it is supplied for human consumption and it shall conform to the standards laid down under regulation 2.2.1 (16). Additionally, it shall have Flash Point (Pensky-Marten closed method) - Not less than 250° C.
- Test for argemone oil shall be negative.
- The oil so refined shall not contain Hexane more than 5.00 ppm.

Palmolein means the liquid fraction obtained by fractionation of palm oil obtained from the fleshy mesocarp of fruits of oil palm (Elaeis Guineensis) tree by the method of expression or solvent extraction. It shall be clear, free from rancidity, suspended or other foreign matter separated water, added colouring and flavouring substances or mineral oils. It shall conform to the following standards, namely:-

Butyro-refractometer reading at 40 °C	43.7 - 52.5
0	)r
Refractive Index at 40 °C	1.4550 - 1.4610
Iodine value (Wij's method)	54-62
Saponification value	195-205
Cloud Point	Not more than 18°C
Unsaponifiable matter	Not more than 1.2 per cent
Acid value	Not more than 6.0

 Palm kernel oil means the oil obtained from sound kernel of the fruits of oil palm (Elaeis guinensis) tree by the method of expression or solvent extraction. It shall be clear, free from rancidity suspended, or other foreign matter, separated water, added colouring and flavouring substances or mineral oil. It shall conform to the following standards, namely:-

Butyro-refractometer reading at 40 °C	35.3 - 39.5
0	r
Refractive Index at 40 °C	1.4490 - 1.4520
Iodine value (Wij's method)	10-23
Saponification value	237-255
Unsaponifiable matter	Not more than 1.2 per cent
Acid value	Not more than 6.0

## **BIS STANDARDS/ REGULATIONS**

- Oil is a commodity consumed by every person. It may become health hazardous unless protected properly.
- Therefore, different standards like PFA, Agmark, and BIS are formulated which give specifications on the quality parameters of oil at the time of sale, the shelf life of the oil in different plastic packaging materials, and specifications on safety and performance of packaging materials.
- The shelf life required for oil in PET/PVC bottles is 60 and 180 days under normal and accelerated storage conditions, respectively.
- The vinyl chloride (VC) monomer content in PVC should be < 1 ppm and VC migration into oil < 10 ppb.</p>

# BIS SPECIFICATIONS FOR PLASTIC PACKAGING MATERIALS FOR PACKING EDIBLE OILS/FATS

IS No- Year	Specification
12724-1989	Flexible packaging materials for packaging of refined edible oil
12883-1989	Polyvinyl chloride (PVC) bottle for edible oils.
12887-1989	Polyethylene terephthalate (PET) bottles for packaging of edible oils. 11352-1985 Specification for flexible packs for packaging vanaspati.
10840-1994	Blow molded HDPE container for packaging of vanaspati.

The place where food is manufactured, processed or handled shall comply with the following requirements:

- 1. The premises shall be located in a sanitary place and free from filthy surroundings and shall maintain overall hygienic environment. All new units shall set up away from environmentally polluted areas.
- 2. The premises to conduct food business for manufacturing should have adequate space for manufacturing and storage to maintain overall hygienic environment.
- 3. The premises shall be clean, adequately lighted and ventilated and sufficient free space for movement.

- 4. Floors, Ceilings and walls must be maintained in a sound condition. They should be smooth and easy to clean with no flaking paint or plaster.
- 5. The floor and skirted walls shall be washed as per requirement with an effective disinfectant the premises shall be kept free from all insects. No spraying shall be done during the conduct of business, but instead fly swats/ flaps should be used to kill spray flies getting into the premises. Windows, doors and other openings shall be fitted with net or screen, as appropriate to make the premise insect free The water used in the manufacturing shall be potable and if required chemical and bacteriological examination of the water shall be done at regular intervals at any recognized laboratory.

- 6. Continuous supply of potable water shall be ensured in the premises. In case of intermittent water supply, adequate storage arrangement for water used in food or washing shall be made.
- 7. Equipment and machinery when employed shall be of such design which will permit easy cleaning. Arrangements for cleaning of containers, tables, working parts of machinery, etc. shall be provided.
- 8. No vessel, container or other equipment, the use of which is likely to cause metallic contamination injurious to health shall be employed in the preparation, packing or storage of food. (Copper or brass vessels shall have proper lining).

- 9. All Equipments shall be kept clean, washed, dried and stacked at the close of business to ensure freedom from growth of mould/ fungi and infestation.
- 10. All Equipments shall be placed well away from the walls to allow proper inspection.
- 11. There should be efficient drainage system and there shall be adequate provisions for disposal of refuse.
- 12. The workers working in processing and preparation shall use clean aprons, hand gloves, and head wears.
- 13. All food handlers should avoid wearing, false nails or other items or loose jewellery that might fall into food and also avoid touching their face or hair.

- 14. Persons suffering from infectious diseases shall not be permitted to work. Any cuts or wounds shall remain covered at all time and the person should not be allowed to come in direct contact with food. 14. All food handlers shall keep their finger nails trimmed, clean and wash their hands with soap, or detergent and water before commencing work and every time after using toilet. Scratching of body parts, hair shall be avoided during food handling processes.
- 15. Eating, chewing, smoking, spitting and nose blowing shall be prohibited within the premises especially while handling food.
- 16. All articles that are stored or are intended for sale shall be fit for consumption and have proper cover to avoid contamination.

- 17. All food handlers shall keep their finger nails trimmed, clean and wash their hands with soap, or detergent and water before commencing work and every time after using toilet. Scratching of body parts, hair shall be avoided during food handling processes.
- 18. The vehicles used to transport foods must be maintained in good repair and kept clean.
- 19. Foods while in transport in packaged form or in containers shall maintain the required temperature.
- 20. Insecticides / disinfectants shall be kept and stored separately and `away from food manufacturing / storing/ handling areas.



## National Institute of Food Technology and Entrepreneurship and Management

Ministry of Food Processing Industries
Plot No. 97, Sector-56, HSIIDC, Industrial Estate, Kundli, Sonipat, Haryana131028

Website: http://www.niftem.ac.in

Email: <a href="mailto:pmfmecell@niftem.ac.in">pmfmecell@niftem.ac.in</a>

**Call:** 0130-2281089