



FSSAI SPECIFICATIONS FOR AMARANTHUS



AATMANIRBHAR BHARAT

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



WHAT IS FSSAI ?

- Any food business operation to function in India should adhere to certain product specific standards, safety and hygienic parameters.
- The food safety regulations are laid down by Food Safety & Standards Authority of India, **came into existence in 2006.**
- Other agencies involved in standardization and quality certification are Bureau of Indian Standards (**BIS**), **AGMARK**, **Codex**.
- FSSAI replaces the then existed laws like Prevention of Food Adulteration Act (1954), Fruit Products Order, Milk & Milk Products Order, Export (Quality Control & Inspection) Act, Meat Products order, Agricultural Produce (Grading & Marketing) Act

WHY FSSAI REGISTRATION REQUIRED?

- Every food business operator involved in the manufacture, processing, storage and distribution and sale of food products must compulsorily obtain FSSAI Registration or License.
- It is a 14-digit registration of a license number which is printed on all the food packages. The 14-digit registration number gives details about the assembling state, producer's permit.



fssai



FOOD SAFETY AND STANDARDS
AUTHORITY OF INDIA

Inspiring Trust, Assuring Safe & Nutritious Food
Ministry of Health and Family Welfare, Government of India



FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA (FSSAI)

- **The Food Safety & Standards Authority of India is the principal Government Authority** responsible for preparing specific regulations under the Act. **FSSAI** is an autonomous body established **under the Ministry of Health & Family Welfare, Government of India**
- **FSSAI** has been established under the **Food Safety and Standards Act, 2006**
- **Came in to action- August 2011**
- **FSSAI is responsible for protecting and promoting public health through the regulation and supervision of food safe.**

BENEFITS OF THE NEW FOOD SAFETY & STANDARD ACT

- Single point access to all laws and departmental controls.
- FSSAI as a single reference point for all matters relating to Food Safety and Standards, Regulations and Enforcement.
- High degree of consumer confidence in quality & safety of food
- A single license by the Licensing Authority for one or more articles of food and for different establishments





Registration: For turnover less than 12 lakh.

State License: For turnover between 12 Lakh to 20 crores.

Central License: For turnover above 20 crore.



FEE STRUCTURE

Types/Category	Registration- 1 Year	Central- 1 year
New Application	Rs. 100	Rs. 7500
Renewal Application	Rs. 100	Rs. 7500
License/Certificate modification	Rs. 100	Rs. 7500
Duplicate Certificate/ License	10% of the applicable certificate fee	10% of the applicable certificate fee



To be taken by businesses or startups having annual turnover below Rs.12 lakhs.

Documents Required

1. Authorized person address proof
2. Passport size photo
3. Business name and address
4. FSSAI declaration form
5. Nature of business details





Businesses having annual turnover above 20 crore can apply for FSSAI central license.

1. Rental Agreement of Business Premises.
2. ID Proof of the Concerned Person (Aadhaar Card / Driving License / Passport / Voter ID)
3. If any Government Registration Certificates (Company Incorporation Certificate / Firm Registration / Partnership Deed / Pan card / GST / Shop & Establishment / Trade License)
4. If the applicant is private limited company or partnership firm then they should provide MOA & AOA or Partnership deed copy.
5. IE Code (Import Export Code) Certificate (for the category of export and import IE code is compulsory)
6. Authority letter from the company letterhead to the concerned person stating that he is authorized to file FSSAI application.
7. List of food category desired to be manufactured (In case of manufacturers).

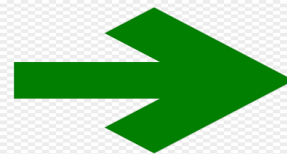


SANITARY AND HYGIENIC REQUIREMENTS FOR FOOD MANUFACTURER/ PROCESSOR/HANDLER

- 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.
- The premises to conduct food business for manufacturing should have adequate space for manufacturing and storage to maintain overall hygienic environment.
- The premises shall be clean, adequately lighted and ventilated and sufficient free space for movement.



- The water used in the manufacturing shall be potable.
- 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.
- 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.
- No vessel, container or other equipment, the use of which is likely to cause metallic contamination injurious to health shall be employed in the process.
- All equipments shall be kept clean, washed, dried and stacked at the close of business to ensure free from growth of mould/ fungi and infestation.



- There should be efficient drainage system and there shall be adequate provisions for disposal of refuse.
- The workers working in processing and preparation shall use clean aprons, hand gloves, and head wears.
- 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.
- 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.
- 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.



General Labelling Requirements

- Nutrition information
- Vegetarian or Non- Vegetarian Symbol
- Name and address of the manufacturer
- Net Quantity
- Lot number of batch identification
- Date of manufacture or packing
- Instructions for use
- List of ingredients
- Name of class II preservative added
- FSSAI Number
- Bar Code



Food labels

Express/Normal (Academic)

Name and address of manufacturer and/or importer
Name and address of the company that produced and/or imported the food item

Net weight
Weight of the food item without its packaging



Nutritional information panel
List of the amount of energy and nutrients the food item contains

Ingredients
List of substances used to make the food item

Country of origin
Place where the food item was produced



Vegetarian



Non-Vegetarian



FSSAI SPECIFICATIONS FOR AMARANTHUS PRODUCTS

Product	Specifications
Amaranthus Squash	TSS-40 ⁰ Brix, Acidity as citric acid (%) 3.5. Preservatives- benzoic acid 600 ppm (max),/ sulphur dioxide 350 ppm (max)/ sorbic acid- 1000 ppm (max)
Amaranthus Pakkavada	The product should be fried in good quality edible oil
Amaranthus cutlet	The ready to eat food item should be fried in good quality cooking oil and ingredient used should sound and healthy
Amaranthus pickle	<ul style="list-style-type: none">•In brine – salt should be 12%•In oil – pieces submerged in oil•In vinegar – acidity should be 2 % Preservatives – benzoic acid (250 ppm max) sulphur dioxide (100 ppm max)



FSSAI Specifications for preservatives for Amaranthus products

Product	Preservatives and its quantity
Amaranthus Squash	Sulphur dioxide 350 ppm/ Benzoic acid -600ppm for 1 liter finished product
Amaranthus Pakkavada	-
Amaranthus cutlet	-
Amaranthus pickle	Benzoic acid - 250ppm/Sulphur dioxide 100 ppm for 1 kg finished product

DEFINITION OF VEGETABLE JUICES ACCORDING TO FSSAI

Thermally processed vegetable juices (squash) - definition

Thermally processed vegetable juices (canned, bottled, flexible or aseptically packed) means the fermented but fermentable product or may be lactic acid fermented product intended for direct consumption obtained from the edible part of one or more vegetable, including roots and tubers (stem, leaves and flowers) (eg: amaranthus and cauliflower) may be clear, turbid or pulpy, may have been concentrated and reconstituted with water suitable for the purpose of maintaining the essential composition and quality factors of the juice and processed by heat in an appropriate manner, before or after being sealed in a container, so as to prevent spoilage.

DEFINITION OF VEGETABLE JUICES ACCORDING TO FSSAI

It may contain salt, nutritive sweeteners, spices and condiments, vinegar. Having undergone lactic acid fermentation not more than 100gm/Kg and any other ingredient suitable for the product.



Sugar – crystallized product obtained from sugarcane or sugar beet. It should be free from dirt, filth or iron filings and added coloring matter. Extraneous matter shall not exceed 0.1% by weight.

DEFINITION OF INGREDIENTS OF PAKKAVADA ACCORDING TO FSSAI

Basen flour – product obtained by grinding dehusked Bengal gram (*Cicer arietium*) and shall not contain any added colouring matter or any other foreign ingredient.

Rice flour – rice shall be the mature kernels or pieces of kernels of *Oryza sativa* obtained from paddy as raw or parboiled. It shall be dry, sweet, clean, wholesome and free from unwholesome poisonous substance. Moisture not more than 16% by weight.





DEFINITION OF INGREDIENTS OF PAKKAVADA ACCORDING TO FSSAI

- **Maida** – fine product made by milling or grinding clean wheat free from rodent hair and excreta and boiling or dressing the resulting wheat meal. Moisture not more than 14% food grade solvents followed by bleaching with adsorbent earth and deodourised with steam. . Gluten on dry basis should not less than 7.5%
- **Corn flour** – starch obtained from maize. It shall contain no added flavour, colour or other chemicals . It shall be free from dirt, insects, larvae and impurities or other extraneous matter. Moisture not more than 12.5%
- **vegetable oil** – any vegetable oil which is obtained by expression or solvent extraction vegetable oil bearing material, deacidified with alkali or refining using permitted





DEFINITION OF OF PICKLE AND ITS INGREDIENTS ACCORDING TO FSSAI

Pickles - pickles means the preparation made from fruits or vegetables or other edible plant material including mushroom free from insect damage or fungal infection, singly or in combination preserved in salt, acid, sugar or any combination of the three. The pickle may contain onion, garlic, ginger, sugar, jaggery, edible vegetable, oil, green or red chillies, spices, limejuice, vinegar/acetic acid, alum, synthetic colours and shall show no sign of fermentation.

preservatives – benzoic acid (250 ppm max)

sulphur dioxide (100 ppm)

Fenugreek - dried mature seeds of *Trigonella foenum graecum L.* The seeds shall be free from any off flavour, mustiness and rancidity. It shall be free from mould, living and dead insects, rodent contamination. The product shall be free from added colour, and other harmful substances. It shall conform following standards:

Moisture - not more than 10 %by weight

Cold water soluble extract on dry basis – not less than 30 % by weight



DEFINITION OF OF PICKLE AND ITS INGREDIENTS ACCORDING TO FSSAI

- **Gingelly oil** - oil expressed from clean and sound seeds of *Sesame indium* black, brown, white or mixed. It shall be clear, free from rancidity, suspended or other foreign matters, separated water, added colouring or flavouring substances or mineral oil. It shall conform to the following standards:-
 - butyro-refractometer reading at 40 °C - 58.0 to 61.0
 - saponification - 188-193
 - iodine value - 103-120
 - acid value - not more than 6%
- **Asafoetida** – means the oleogumresin obtained from rhizome and root of *Ferula rubricaulis* and other species of *Ferula* . It shall not contain any colophony resin, galbonum resin, ammoniacum resin or other foreign resin.



- **Chilli powder** - powder obtained by grinding clean ripe fruits or pods of *Capsicum annum L* and *Capsicum frutescens L*. the powder shall be dry, free from dirt, extraneous colouring matter, flavouring matter, mineral oil and other harmful substances the chilli powder contain any edible vegetable oil to a maximum limit of 2.0% by weight under a label declaration for the amount and nature of oil used. Moisture content not more than 11.0% by weight. Crude fibre not more than 30.0% by weight
- **Salt** - crystalline solid, white, pale, pink or light grey in colour free from contamination with clay, grit and other extraneous adulterant and impurities. It shall not contain moisture in excess of 6% of the weight of the undried sample. The sodium chloride content as NaCl (on dry basis) 96 %.





- **SYNTHETIC VINEGAR MEANS THE PRODUCT PREPARED FROM ACETIC ACID**
- Acidity of the product shall not be less than 3.75 percent m/v.
- It shall not contain sulphuric acid or any other mineral acid. It shall be free from any foreign substance or colouring matter except caramel.
- Synthetic vinegar shall be distinctly labelled as **SYNTHETIC - PREPARED FROM ACETIC ACID**.
- The container shall be well filled with the product and shall occupy
- not less than 90.0 percent of the water capacity of the container, when packed in the rigid containers.
- The water capacity of the container is the volume of distilled water at 20°C which the sealed container is capable of holding when completely filled.



DEFINITION OF INGREDIENTS OF CUTLET ACCORDING TO FSSAI

- Corn flour – starch obtained from maize. It shall contain no added flavour, colour or other chemicals . It shall be free from dirt, insects, larvae and impurities or other extraneous matter. Moisture not more than 12.5%.
- vegetable oil – any vegetable oil which is obtained by expression or solvent extraction vegetable oil bearing material, deacidified with alkali.
- Mixed masala - means the mixture of clean, dried and sound aromatic herbs and spices. It may also contain dried vegetables and fruits, oilseeds, garlic, ginger, poppy seeds and curry leaves . It shall be free from added colouring matter, mould growth and insect infestation. Proportion of extraneous matter shall not exceed 5% by weight (out of which organic matter 3% and inorganic matter 2%).





For More details Contact:

National Institute of Food Technology and
Entrepreneurship and Management
Ministry of Food Processing Industries
Plot No. 97, Sector-56, HSIIDC, Industrial
Estate, Kundli, Sonipat, Haryana-131028

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

Email: pmfmecell@niftem.ac.in

Call: 0130-2281089