

# Handbook on Manufacture of Indian Kitchen Spices (Masala Powder) with Formulations, Processes and Machinery Details (4th Revised Edition)

**Author:** NPCS Board of Food Technologists

**Format:** Paperback

**ISBN:** 9788193733967

**Code:** NI307

**Pages:** 344

**Price:** Rs. 0.00    **US\$** 0.00

**Publisher:** NIIR PROJECT CONSULTANCY SERVICES

Usually ships within 5 days

Handbook on Manufacture of Indian Kitchen Spices (Masala Powder) with Formulations, Processes and Machinery Details (4th Revised Edition)

(Chaat Masala, Sambar Masala, Pav Bhaji Masala, Garam Masala, Goda Masala, Pani Puri Masala, Kitchen King Masala, Thandai Masala Powder, Meat Masala, Rasam Powder, Kesari Milk Masala, Punjabi Chole Masala, Shahi Biryani Masala, Tea Masala Powder, Jaljeera Masala, Tandoori Masala, Fish Curry Masala, Chicken Masala, Pickle Masala, Curry Powder)

Spices or Masala as it is called in Hindi, may be called the “heartbeat” of an Indian kitchen. The secret ingredient that makes Indian food truly Indian is the generous use of signature spices. From ancient times of the maharaja’s, spices have added unforgettable flavours and life to Indian cuisine. Indian spices offer significant health benefits and contribute towards an individual's healthy life. There are a large number of various spices, used along with food such as Chilli (Mirchi), Turmeric (Haldi), Coriander (Dhania), Cumin (Jeera), Mustard (Rai), Fenugreek (Methi), Sesame (Til), Cardamon, Peppercorns (Kali Mirchi), Clove, Fennel (Saunf), Nutmeg and Mace etc.

In modern times, international trade in spices and condiments have increased dramatically which could be attributed to several factors including rapid advances in transportation, permitting easy accessibility to world markets, growing demand from industrial food manufacturers of wide ranging convenience foods. As the demand for Indian spices is increasing day by day, Indian manufacturers are producing spices of high quality.

The book presents the fundamental concepts of Spices (Masala Powder) Indian Kitchen Spices product mix in a manner that new entrepreneurs can understand easily. It covers Formulation for spices i.e., Chaat Masala, Chana Masala, Sambar Masala, Pav Bhaji Masala, Garam Masala, Goda Masala, Pani Puri Masala, Kitchen King Masala, Thandai Masala Powder, Meat Masala, Rasam Powder, Kesari Milk Masala, Punjabi Chole Masala, Shahi Biryani Masala, Tea Masala Powder, Jaljeera Masala, Tandoori Masala, Fish Curry Masala, Chicken Masala, Pickle Masala, Curry Masala.

This book contains manufacturing process, Packaging and Labelling of Spices. The highlighting segments of this book are Spices Nutritional value, Special Qualities and Specifications, Cryogenic Grinding Technology, Food Safety & Quality, BIS Specifications, Quality Control, Market, Sample Production Plant Layout and Photograph of Machinery with Supplier's Contact Details. It also covers Good manufacturing practices in Food Industry, Case Study for Everest and MDH Masala and Top Spice Brands of India.

This book is aimed for those who are interested in Spices business, can find the complete information about Manufacture of Indian Kitchen Spices (Masala Powder). It will be very informative and useful to consultants, new entrepreneurs, startups, technocrats, research scholars, libraries and existing units.

#### Tags

#ChaatMasala #SambarMasala #PavBhaji #GaramMasala #GodaMasala #PaniPuriMasala  
#KitchenKingMasala #ThandaiMasalaPowder #MeatMasala #RasamPowder #KesariMilkMasala  
#PunjabiCholeMasala #ShahiBiryaniMasala, #TeaMasalaPowder #JaljeeraMasala #TandooriMasala  
#FishCurryMasala #ChickenMasala #PickleMasala #CurryPowder #TurmericPowder #RedChilliPowder  
#DhaniyaPowder #GaramMasala #SabjiMasala #PopcornMasala #Kitchenspices #Kitchen #spices  
#organicspices #organic #cooking #MasalaPowder #GaramMasala #ChaatMasala #SambarMasala  
#PavBhajiMasala #Chillipowder #spicesprocessing #SpicesIndustry #StartupProject #startyourbusiness  
#startupidea #entrepreneur #projectreport #DetailedProjectReport #businessconsultant  
#businessfeasibilityreport #BusinessPlan #spicesbusiness #masala #spices #Indianspices #masala  
#marketopportunities #indianfood #NPCS

## Contents

### CONTENTS

#### 1. HOW TO START SPICE BUSINESS

Introduction

Licenses and Marketing Strategies

Wholesale Resources and Pricing

Places to Sell and Business Account

Basic Business Requirements

How to Increase Revenue as a Spice Entrepreneur

(i) Expand Product Line

(ii) Internet Marketing

(iii) PR & Thought Leadership

Successful Business Plans for Spices Businesses

(i) Check out the Competition

(ii) Finding a Non-Competitive Business Mentor

(iii) Acquisitions vs. Startups

(iv) Consider Franchising

List of Subsidy and Schemes

(i) Subsidy for Sending Spices Samples Abroad

(ii) Subsidy for Printing Promotional Literature/ Video/ Brochures

(iii) Subsidy for Promotion of Indian Spice Brand Abroad

(iv) Subsidy for Spices Processing in North- Eastern Region

(v) Subsidy for Participating in International Trade Fairs and Meetings

(vi) Home Based Spice Business – Manufacturing Process

(i) Market Opportunity

(ii) Different Products

(iii) Registration & License

## 2. SPICES

Introduction

Basic Uses for Spices

List of Major Indian Spices

Uses & Application of Spices Masala

Spice Blends

Adherence to High Spice Quality Standards

Properties of Spices

Major Compounds in Spices

## 3. WHOLE SPICES

Chilli (Mirch) Powder

Turmeric (Haldi) Powder

Coriander (Dhania) Powder

Cumin (Jeera)

Mustard (Rai)

Fenugreek (Methi)

Sesame (Til)

Cardamom

Peppercorns (Kali Mirchi)

Clove

Fennel (Saunf)

Nutmeg and Mace

## 4. NUTRITIONAL VALUE OF DIFFERENT SPICES

Anise Seed

Allspice

Bay leaf (Laurus Nobilis)

Black Pepper

Capparis Spinosa

Caraway Seed

Cardamom

Cayenne Peppers (Capsicum Annuum var.

Annuum)

Cinnamon Spice (Cinnamomum Verum)

Cloves (Sygizium Aromaticum), Ground

Coriander Seeds (Coriander Sativum)

Cumin Seeds (Cuminum Cyminum)

Fennel Seed (Foeniculum Vulgare)

Fenugreeks (Trigonella Foenum-Graecum)

Benefits of Including Spices in Our Diet Culinary Uses of Spices

## 5. SPICE QUALITIES AND SPECIFICATIONS

Specification of Spice-Exporting Nations

(i) The Indian Standards Institution

(ii) Directorate of Marketing and Inspection, Administering Quality Control and Preshipment Inspection

(iii) Grade Specifications for Sarawak Pepper in Malaysia

(iv) Grading of Nutmeg in Grenada and Indonesia

(v) Specification of Paprika in Hungary and Spain

(vi) Specifications of Other Exporting Nations Spice Quality

A. Insect Infestation

(i) Harmful Insects

- (ii) Fumigation for Insects
- (iii) Other Ways of Exterminating Insects
- B. Microorganisms
  - (i) Types of Microbes
  - (ii) Molds and Aflatoxin
- C. Sterilizing or Pasteurizing Methods
  - (i) Ethylene Oxide Gas Method
  - (ii) Irradiation
  - (iii) Steam Sterilization
- D. Chemical Properties
  - (i) Pungency Standards
  - (ii) Flavor/Aroma
  - (iii) Color

## 6. MANUFACTURING PROCESS OF BLEND

### SPICES

Cleaning

Drying

Grading

Roasting

Pulverizing

For Grinding the Spices Following Machines are used

List of Machinery Required Process Flow Diagram

## 7. CRYOGENIC GRINDING TECHNOLOGY

Introduction

Market Opportunities

Advantages

Role of Carbon Di-oxide in Spice Processing Industry

Fine Grinding Using Cryogenic Grinding Technology

Fine Powders with a Big Impact

## 8. FORMULATION OF SPICES (MASALA POWDER) INDIAN KITCHEN SPICES PRODUCT MIX

Manufacture of Indian Kitchen Spices Product Mix

Chaat Masala

Chana Masala

Sambar Masala

Pav Bhaji Masala

Garam Masala

Goda Masala

Pani Puri Masala

Kitchen King Masala

Thandai Masala Powder

Meat Masala

Rasam Powder

Kesari Milk Masala

Punjabi Chole Masala

Shahi Biryani Masala

Tea Masala Powder

Jaljeera Masala

Tandoori Masala

Fish Curry Masala

Chicken Masala

Pickle Masala  
Curry Masala

## 9. FOOD SAFETY & QUALITY

General Principles of Food Safety

- (i) General Principles to be followed in Administration of Act
- (ii) Hygiene and Health Requirements
- (iii) Communicable Diseases and Injuries
- (iv) General Food Hygiene Training
- (v) Safety during Packaging and Labelling of Foods Restrictions of Advertisement and Prohibition as to Unfair Trade Practices

## 10. QUALITY CONTROL

Quality Assurance in Raw Material Supply

Quality Assurance and Control in the Processing Plant

- (i) Appearance and Presence of Contaminants
- (ii) Odour and Flavour
- (iii) Moisture Content
- (iv) Control of Processing
  - (i) Washing
  - (ii) Other Cleaning Methods
  - (iii) Drying
  - (iv) Grinding
- (v) Packaging and Storage of Finished Products
  - 1. Acidity Measurement
  - 2. Chlorine Measurement
  - 3. Fill-Weight Measurement
  - 4. Glass Container Measurement
  - 5. Weight of Containers
  - 6. Capacity of Containers
  - 7. Headspace
  - 8. Vacuum
  - 9. Dimensions of Containers
  - 10. Faults in Glass
  - 11. Label Measurement and Quality Checks
  - 12. Label Faults may be divided into Major and Minor Faults
  - 13. Loaf Volume Measurement
  - 14. Moisture Content Measurement
  - 15. Moisture Content Measurement: Spices
  - 16. Solids Content Measurement
  - 17. Packaging Film Measurement
  - 18. PH Measurement
  - 19. Plastic Container Measurement
  - 20. Salt Measurement
  - 21. Sieving Tests (Flours and Spices)
  - 22. Filth Test
  - 23. Sodium Benzoate Measurement
  - 24. Sodium Metabisulphite Measurement
  - 25. Starch Gelatinization Measurement (Modified 'Falling Number' Method)

## 11. PACKAGING AND LABELLING OF SPICES

Spoilage Factors

- (i) Moisture Content

- (ii) Loss of Aroma/Flavour Discolouration
- (i) Insect Infestation
- (ii) Microbial Contamination
- (iii) Spices Packaging Requirement
- Packaging Material Requirement
- Packaging Method and Materials for Spices Types of Packing
- (i) Bulk Packaging
- (ii) Institutional Packages
- (iii) Consumer Packages
- (iv) Composite Containers and Plastic Pouches for Whole Spices & Powders
- (v) Spices Packed in Pouch-in-Carton Marking of Masala Packets Special Conditions for Grant of Certificate of Authorization

## 12. BIS SPECIFICATIONS

## 13. TOP 10 SPICE BRANDS OF INDIA

Everest  
 MDH  
 Catch  
 Mothers Recipe  
 Cookme  
 Priya  
 Pushp  
 Ramdev  
 Nilon's

## 14. MARKET OF SPICES

The Indian Spices Industry  
 Adherence to High Spice Quality Standards  
 India's Spice Parks  
 Product Range in Indian Market

## 15. CASE STUDY FOR EVEREST MASALA

History  
 Product  
 Brand  
 Achievements  
 Market

## 16. CASE STUDY FOR MDH MASALA

History  
 Products  
 (i) Ground Single Spices  
 (ii) Blended Spices Market

## 17. GOOD MANUFACTURING PRACTICES IN FOOD INDUSTRY

Food Industry Standards GMP Practices for Food  
 (i) Design and Facilities  
 (ii) Premises and Rooms  
 (iii) Internal Structures & Fittings  
 (iv) Equipment  
 (v) Containers for Waste and Inedible Substances Facilities  
 (i) Water Supply

- (ii) Drainage and Waste Disposal
- (iii) Cleaning
- (iv) Personnel Hygiene Facilities and Toilets
- (v) Temperature Control
- (vi) Air Quality and Ventilation
- (vii) Lighting
- (viii) Power Back up
- (ix) Storage Control of Operation
- (i) Time and Temperature Control
- (ii) Control of Other Specific Process Steps
- (iii) Specifications Microbiological Cross Contamination Physical and Chemical Contamination Incoming Materials Requirements Packaging Water
- (i) Water, Ice and Steam in Contact with Food
- (ii) Water, Ice and Steam not in Contact with Food
- (iii) Water pipes & Storage Tanks
- (iv) Management and Supervision Documentation and Records Product Recall & Traceability Storage
- Maintenance and Sanitation
- (i) Pest Control
- (ii) Waste Management
- (iii) Personal Hygiene
- Quality Control
- Transportation
- Product Information and Consumer Awareness
- Competence & Training
- Temporary/Mobile Premises, Vending Machines

## 18. ANALYSIS OF FOODS SPICES AND CONDIMENTS

Determination of Moisture (Karl Fischer Method)

Principle

Apparatus

Direct Titration Method

Back Titration

Black Pepper

Determination of Bulk Density (Mass /litre)

Procedure

Determination of Light Berries

Reagents

Determination of Piperine Content

Principle

Apparatus and Reagents

Apparatus and Reagents

An Alternative Method for Determination of

Piperine Content by GC Method Reagents

Gas Chromatography

The GC Analysis

Program Conditions

Saffron (Filaments and Powder)

Identification Test

Determination of Extraneous Matter

Apparatus

Procedure

Calculation

Determination of Picrocrocin, Safranal and

Crocine  
Apparatus  
Procedure  
Expression of Results  
Determination of Total Nitrogen  
Microscopic Examination of Spices Procedure  
Detection of Argemone Seeds in Mustard Procedure  
Detection of Mineral Oil in Black Pepper Procedure  
Detection of Papaya seeds in Black Pepper Principle Procedure  
Detection of Turmeric in Chillies and Coriander Principle  
Reagents  
Procedure  
Method for Capsaicin Content in Chilli Powder  
Capsaicinoids in Capsicums and Their Extractives by Liquid Chromatographic Method (AOAC 995.03)  
Principle  
Apparatus  
Reagents  
Extraction  
LC Determination Calculation  
a) UV Detection  
(b) Fluorescence Detection Method for Measuring Color Value in Chillies  
Apparatus and Reagents  
Determination  
Calculations

## 19. FLAVOUR AND CALORIFIC VALUE OF SPICES

Important Flavour Compounds in Spices  
Important Flavour Compounds in a Few Culinary  
Herbal Spices  
Calorific Value of Spices  
Spices in Health-Giving and Anti-Disease Role

## 20. SAMPLE SPICES PRODUCTION PLANT LAYOUT

Need of Plant Layout  
Workplace Types

## 21. SUPPLIERS OF WHOLE SPICES

## 22. PHOTOGRAPHS OF MACHINERY WITH SUPPLIER'S CONTACT DETAILS

## 23. SPICE GLOSSARY

## 24. SPICE PRODUCING

# About NIIR

**NIIR PROJECT CONSULTANCY SERVICES (NPCS)** is a reliable name in the industrial world for offering integrated technical consultancy services. NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our various services are: Detailed Project Report, Business Plan for Manufacturing Plant, Start-up Ideas, Business Ideas for Entrepreneurs, Start up Business Opportunities, entrepreneurship projects, Successful Business Plan, Industry Trends, Market Research, Manufacturing Process, Machinery, Raw Materials, project report, Cost and Revenue, Pre-feasibility study for Profitable Manufacturing Business, Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Business Opportunities, Investment Opportunities for Most Profitable Business in India, Manufacturing Business Ideas, Preparation of Project Profile, Pre-Investment and Pre-Feasibility Study, Market Research Study, Preparation of Techno-Economic Feasibility Report, Identification and Section of Plant, Process, Equipment, General Guidance, Startup Help, Technical and Commercial Counseling for setting up new industrial project and Most Profitable Small Scale Business.

NPCS also publishes various process technology, technical, reference, self employment and startup books, directory, business and industry database, bankable detailed project report, market research report on various industries, small scale industry and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by professionals including project engineers, information services bureau, consultants and project consultancy firms as one of the input in their research.

Our Detailed Project report aims at providing all the critical data required by any entrepreneur vying to venture into Project. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.

---

**NIIR PROJECT CONSULTANCY SERVICES** , 106-E, Kamla Nagar, New Delhi-110007, India. **Email:** [npcs.india@gmail.com](mailto:npcs.india@gmail.com) **Website:** [NIIR.org](http://NIIR.org)

Sun, 28 Apr 2024 16:46:17 +0530