INTRODUCTION

Spice Plant Components
Uses of Spices

AJOWAN OR BISHOPS WEED

Bot Name
Family
Indian Names
Description & Distribution
Composition
Uses

AMCHUR

Bot Name
Family
Indian Names
Description & Distribution
Composition
ANISEED

Bot, Name
Family
Indian Names
Description & Distribution
Composition
Distillation of Oil
Uses

ASAFOETIDA

Bot Name
Family
Indian Names
Description & Distribution
Types/Varieties of Asafoetida
Composition
Uses

CAPSICUMS OR CHILLIES

Bot Name
Bird Chilli
Tobasco Chilli
Family
Indian Names
Description & Distribution
Varieties
Uses
Medicinal Properties

CARAWAY

Bot Name
Family
Indian Names
Description & Distribution
Composition
Uses

CARDAMOM (GREATER CARDAMOM & LESSER CARDAMOM)

Small Cardamoms
Large Cardamoms
Large Cardamom Species
Composition
Uses

GREATER CARDAMOM

Bot name
Indian Names
Description & Distribution
Uses
Round Cardamom
Bot Name
Description & Distribution
Uses
Cambodian Cardamom
Greater Indian Cardamom or Nepal Cardamom
Bot Name
Indian Names
Description & Distribution
Composition
Volatile oil
Uses

CASSIA

ISO Classification of Important Cassia Species
Jangli-Dalchini
Bot Name
Family
Description & Distribution
Uses
Tejpat (Indian Cassia Lignea)
Bot Name
Family
Indian Names
Description & Distribution
Leaf Oil
Bark Oil
Uses
Tezpat
Bot. Name
Family
Indian Names
Description & Distribution
Uses
Cassia or Cassia China
Bot Name
Family
Description & Distribution
Preparation/Curing of Cassia Bark
Composition
Cassia Oil
Adulteration in Cassia Oil

CELERY SEED
Bot. Name
Family
Indian Names
Description & Distribution
Composition
Volatile Oil
Uses

CINNAMON
Bot Name
Family
Indian Names
Description & Distribution
Composition
Uses

CLOVE
Bot Name
Family
Indian Names
Description & Distribution
Preparation of Cloves
Composition
Uses

CORIANDER
Bot Name
Family
Indian Names
Description & Distribution
Composition
Uses
CUMIN SEED

Bot Name
Family
Indian Names
Description & Distribution
Composition
Volatile Oil
Uses

CUMIN BLACK

Bot. Name
Family
Indian Names
Description & Distribution
Composition
Volatile Oil
Essential Oil
Uses

FENNEL

Bot. Name
Family
Indian Names
Description & Distribution
Varieties
Composition
Volatile Oil
Uses

FENUGREEK

Bot. Name
Family
Indian Names
Description & Distribution
Composition
Volatile Oil
Uses
In Medicine

GARLIC
Bot. Name  
Family  
Indian Names  
Description & Distribution  
Two Garlic Crops a year  
Varieties  
Composition  
Garlic Powder  
Uses  
Garlic as Condiment  
Garlic Oil as an Insecticide an Antilrtoic

GINGER

Bot. Name  
Family  
Indian Names  
Description & Distribution  
Composition  
Volatile Oil  
Ginger Oleoresin  
Uses  
Recovery of Starch & Soft Drinks from Spent Ginger  
Alcoholic Beverages  
Use of Ginger Oil

NUTMEG

Bot Name  
Family  
Indian Names  
Description & Distribution  
Composition  
Quality Grades  
Whole, Sound Nutmegs  
Nutmeg Butter  
Leaves  
Uses

PEPPER-BLACK, WHITE & GREEN

Bot. Name  
Family  
Indian Names  
Description & Distribution  
Types/Varieties
Yield/Recovery of Dried Pepper
Composition
Uses

TAMARIND

Bot. Name
Family
Indian Names
Description & Distribution
Composition Tamarind Pulp
Tamarind Juice Concentrate
Uses

TURMERIC

Bot. Name
Family
Indian Names
Description & Distribution
Harvesting & Processing (Curing) of Turmeric
Varieties
Composition
Uses

AJOWAN EXTRACTION FROM AJOWAN SEEDS

Process of Manufacturing
Steam Distillation at Reduced Pressure
Distillation at High Pressure
Superheated Steam Distillation
Equipment
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Profit Sales Ratio
Rate of Return
Break Even Point

ASAFOETIDA (HING)
BLACK PEPPER

Uses & Application
Analysis of Trade Grades & By Products of Pepper
Black Pepper Cultivation
Preparation of Land
Propagation
Planting
Post Planting Operations
Diseases & Pests
Harvesting & Yield
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Gross Profit

CHILLI POWDER

Uses & Application
Process of Manufacture
Grinding
Principles of Operations
Packing
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Profit Sales Ratio
Rate of Return

DRYING OF RED CHILLIES, HALDI, DHANIA, PEA & GREEN PEAS

Uses & Application
Red Chilli Haldi (Turmeric)
Dhania
Peas
Green Peas
Manufacturing Process
Selection & Grading
Washing
Peeling
Drying
Grinding
Packing & Storage
Dehydration of the Product
Lal Mirch
Turmeric (Haldi)
Coriander
Peas
Green Peas
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Profit Sales Ratio
Rate of Return
Break Even Point

DRY GINGER FROM GREEN GINGER

Uses & Application
Process of Manufacture
Ginger Not Divested of Cork
Ginger Clivested of Cork
DEHYDRATED ONIONS & ONION POWDER

Uses of Dehydrated Onions
Process of Manufacture
Dehydration Method & Dehydrator
Methods
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Profit Sales Ratio
Rate of Return
Break Even Point

GARLIC POWDER

Uses & Application
Manufacturing Process
Washing
Peeling
Sulphitation
Dehydration
Packaging
Storage
Safety Precautions & Other Cares in Garlic Dehydration
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Profit Sales Ratio
Rate of Return
Break Even Point

MUSTARD POWDER

Uses & Application
Manufacturing Process
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Profit Sales Ratio
Rate of Return
Break Even Point

OLEORESINS FROM CHILLI & GINGER (EXTRACTION)

Uses & Application
Role in Human Physiology
Paprika as Colourant & Flavourant
Production of Spice Oleoresin (Capsicum)
Conditions of Extraction
Solvent Stripping from Miscella
Location of Oleoresin Plant
Process of Manufacture
Drying
Grinding
Solventization
Recovery of Solvent
Cake Grinding
Process Flow Chart
Ginger Oil & Oleoresin
Manufacturing Process
Preparation of Raw Material
Cleaning
Milling
Soaking
Loading or Charging
Bleaching of Ginger
Manufacturing Process
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Profit Sales Ratio
Rate of Return
Break Even Point

**TURMERIC POWDER**

Uses & Application
Process of Manufacture
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Profit Sales Ratio
Rate of Return
Break Even Point

**TAMARIND SEED POWDER**

Uses & Application
Manufacturing Process
First Method
Washing of the Tamarind Seeds
Fumigation
Cleaning
Roasting
Cooling
Decortication (Hull Removal & Kernel Collection)
Grading of Kernels
Washing of Properly Parched Kernels in Cold Water
Plant Economic
Land & Building
Plant & Machinery
Fixed Capital
Raw Materials
Total Working Capital
Total Capital Investment
Turnover
Profit Sales Ratio
Rate of Return
Break Even Point

PROCESS OF MANUFACTURE & FORMULAES

Curry Powder
Kachhi Biryani
South Indian Curry
Fish Masala
Fish Kabab Masala
Fish Pulao
Potato Meat Puri Masala
Masala for Rice of Fish
Pickle Masala (Mango)
Thandai-Powder
Chat Masala
Fish Masala
Jal Jeera
Curry Powder
Tandoori Chicken Powder
Sambhar Powder
Garam Masala
Mutton Biryani Masala
Pickle Masala (Mango)
Curry Powder
Formulae for Spices
Raita Masala
Jal-Jira
Madras Curry Powder
Sambhar Powder
Garam Masala
Chaat Masala
Jal-Jira
Sambhar
Meat Masala
Tandoori Chicken Powder
Punjabi Chola Ka Masala
Curry Powder
Kachhi Biryani
South Indian Curry
Fish Masala
Fish Pulao Masala
Potato Meat Puri Masala
Masala for Rice of Fish
Disintegrating & Powdering
Principles of Operations
Drying
Grinding
Principles of Operations
Mixing
Packing

PACKAGING OF SPICES/MASALA

Packaging of Ground Spices
Probable Shell of Ground Spices in Different Flexible Pouches
Bulk Packaging & Storage of Whole Spices

METHOD OF TEST FOR SPICES & CONDIMENTS

Scope
Extraneous Matter
Grinding of Sample for Chemical Analysis
Principle
Total Ash
Apparatus
Determination
Water Insoluble Ash
Acid Insoluble Ash
Procedure
Moisture Content
Terminology for Spices & Condiments
List of Spices & Condiments

AGMARK-SYMBOL OF QUALITY & PURITY

What is Agmark?
Why Agmark?
How Agmark Certification is Done?
Affixing the Agmark label Involves four Stages
While Buying Agmark Products Please Ensure Consumer Satisfaction
PRESENT MANUFACTURERS/SUPPLIERS OF PLANT & EQUIPMENTS FOR SPICES

Pulveriser/Grinder
Mixer
Disintegrater
Packaging Machines

PLANT & MACHINERY USED

Pulveriser/Grinder
Outstanding Features
Standard Equipment
Space Requirement
Packaging Machines
FFS Machines for Packaging of Food Products
Requirements of Packaging Machinery

NATIONAL STANDARDS ON PACKAGING CODE FOR SPICES & CONDIMENTS

Spices & Condiments
Whole Spices
Black Pepper, Whole
Miscellaneous Ginger
Ginger, Ground
Curry Powder
Chillies
Saffron
Tamarind Concentrate
Cloves

IMPORTERS OF SPICES

EXPORTERS OF SPICES

PRESENT MANUFACTURERS OF SPICES

SPICES BOARD

SPICES RESEARCH CENTRES IN INDIA