



## 1. Product Details

- Product:** Cloves (Whole)
- Origin:** India (Kerala, Tamil Nadu, Karnataka), Sri Lanka, Indonesia, Madagascar
- Botanical Name:** *Syzygium aromaticum*
- Form:** Whole dried flower buds



## 2. Physical Specifications

| Parameter                 | Specification/Range                  |
|---------------------------|--------------------------------------|
| Appearance                | Whole, dried flower buds             |
| Color                     | Dark brown to reddish-brown          |
| Size                      | 10 mm to 16 mm                       |
| Length                    | 1.2 cm to 2.0 cm                     |
| Head                      | Intact, round, firm, 4-6 mm diameter |
| Texture                   | Firm, hard, and aromatic             |
| Moisture Content          | 10% to 12% max                       |
| Foreign Matter            | 0.5% to 1% max                       |
| Stems                     | 1% to 3% max                         |
| Damaged/Discolored Cloves | 2% max                               |
| Volatile Oil Content      | 12% to 18% (High Eugenol Content)    |
| Eugenol Content           | 70% to 85%                           |
| Density                   | 140 to 160 grams per 100 ml          |
| Odor/Aroma                | Strong, spicy, and aromatic          |
| Taste                     | Pungent, warm, and slightly bitter   |

## 3. Chemical Specifications

| Parameter            | Specification  |
|----------------------|----------------|
| Volatile Oil Content | 12% to 18%     |
| Eugenol Content      | 70% to 85%     |
| Moisture Content     | 10% to 12% max |
| Total Ash            | 5% to 7% max   |
| Acid Insoluble Ash   | 1% to 2% max   |

## 4. Grades of Cloves

| Grade                            | Description                        |
|----------------------------------|------------------------------------|
| <b>Handpicked Superior (HPS)</b> | Uniform size, color, and aroma     |
| <b>Grade 1</b>                   | Clean, dark brown, less broken     |
| <b>Grade 2</b>                   | Slight variation in size and color |
| <b>Grade 3</b>                   | Broken or smaller cloves           |

## 5. Packing and Shipping Details

- **Packing:**
  - PP/Jute Bags or Cartons
  - Standard Sizes: **10kg, 25kg, 50kg** bags
- **Load Capacity:**
  - **20 FT Container:** 10-12 Metric Tons (MT)
  - **40 FT Container:** 20-22 Metric Tons (MT)
- **Shelf Life:** Up to **2 years** when stored in a cool, dry place, away from moisture and sunlight.

## 6. Key Features

- High **volatile oil** and **eugenol content** ensuring rich aroma and strong flavor.
- Handpicked and machine-cleaned for premium quality.
- Free from foreign matter, stems, and infestation.
- Available in multiple grades to meet various requirements.

