

Masala Factory E-commerce Product Model

This document describes a single MongoDB product model for a Masala (spices) factory e-commerce website where both retail (chillar) and wholesale (bulk) buying options are available. It also explains how the model works from the frontend perspective.

1. Product Model (Mongoose Schema)

- **productName**: String (required) - e.g., "Turmeric Powder"
 - **description**: String - product details
 - **category**: String (required) - e.g., "Spices"
 - **subCategory**: String - e.g., "Powdered Masala"
 - **brandName**: String - factory brand name
- Packaging**
- **packSize**: String (required) - e.g., "100g", "500g"
 - **packType**: String (required) - "Pouch", "Jar", "Box", "Bulk Bag"
 - **ingredients**: [String] - e.g., ["Turmeric root"]
- Manufacturing Details**
- **manufactureDate**: Date
 - **expiryDate**: Date
 - **batchNo**: String
 - **fssaiLicenseNo**: String
- Pricing & Stock**
- **priceRetail**: Number (required) - retail price per pack
 - **wholesaleTiers**: Array of { minQty, price } - bulk pricing options
 - **minOrderQty**: Number - minimum order quantity
 - **stock**: Number (required) - total stock
- Media**
- **productImages**: [String] (required) - Cloud storage URLs
 - **labellImage**: String
 - **videoUrl**: String
- Logistics**
- **shippingWeight**: Number (grams/kg)
 - **shippingTime**: String
 - **returnPolicy**: String
- Marketing**
- **tags**: [String]
 - **featured**, **trending**, **newArrival**: Boolean flags
- Admin/Seller**
- **sellerId**: ObjectId (User reference)
 - **status**: String (enum: pending, approved, rejected, active, inactive)

2. How It Works (Frontend Perspective)

****Product Listing Page****

- Customers see product details, retail price, and a note that wholesale options are available.

****Product Detail Page****

- Shows retail price and wholesale tier table (e.g., 50+ packs → ■90 each, 200+ packs → ■80 each).

****Quantity Selection****

- Customer selects quantity. The correct price (retail or wholesale) applies depending on chosen qty.
- Example: 20 packs → retail price, 60 packs → wholesale tier price.

****Cart & Checkout****

- Cart displays selected qty, applied price, and total.
- Example: 20 packs × ■100 = ■2000, 60 packs × ■90 = ■5400.

****Order Placement****

- Backend rechecks qty and applies the correct pricing tier before payment.

Summary

This model supports both chillar (retail) and wholesale sales in a single schema. The frontend simply displays the retail price and wholesale tiers. The backend ensures correct pricing based on quantity at checkout.