

Carton Box Packing

Packing Considerations

- Carton Type: Corrugated cardboard boxes with ventilation holes to prevent moisture buildup.
- Lining Material: Plastic liners or paper to maintain freshness.
- Sorting & Grading: Uniform size, shape, and ripeness.
- Labeling: Variety, origin, weight, and handling instructions.

Carton Box Packing

Carton boxes are a widely used packaging solution for exporting tomatoes due to their lightweight, cost-effectiveness, and customizability. They provide adequate protection, ventilation, and easy handling for both bulk and retail shipments.

Common Packing Weights

Carton Type	Weight Capacity
Small Carton	2kg – 5kg
Medium Carton	5kg – 10kg
Large Carton	10kg – 15kg
Extra Large Carton	15kg – 25kg





STORAGE & TRANSPORTATION

- Temperature: 10°C 15°C to prevent chilling injury.
- Humidity: 85% 95% RH to maintain freshness.
- Ventilation: Proper airflow to avoid moisture buildup.
- Handling: Avoid stacking too high to prevent crushing.

GRADING & SORTING STANDARDS

Tomatoes are graded based on:

- Size: Small, medium, or large.
- Color & Ripeness: Fully ripe, semiripe, or green-matured (for long transit).
- Quality: Free from damage, cracks, and blemishes.



Plastic Crates

Storage & Transport Conditions

- Temperature: 10°C 15°C (prevents chilling injury).
- Humidity: 85% 95% (reduces dehydration).
- Stacking: Avoid overstacking to prevent crushing.
- Ventilation: Airflow maintained through crate design

Plastic Crates for Tomato Exports

Plastic crates are a durable, reusable, and ventilated packaging solution for tomato exports. They offer better protection, airflow, and stacking efficiency than traditional cartons, making them ideal for bulk transport and long-distance shipping.

Common Packing Weights

Crate Size (L \times W \times H cm)	Packing Weight (kg)
Small (40 × 30 × 15)	5 – 7 kg
Medium (50 × 35 × 20)	10 – 12 kg
Large (60 × 40 × 25)	15 – 20 kg





GRADING & SORTING STANDARDS

- Tomatoes are sorted based on:
- Size Small (30-50mm), Medium (50-70mm), Large (70-90mm).
- Color & Ripeness Green, Semiripe, Ripe.
- Quality No cracks, blemishes, or over-ripeness.

ADVANTAGES OF PLASTIC CRATE PACKING

- Ventilation Reduces moisture buildup, maintaining freshness.
- Durability Protects against crushing and impact during transit.
- Reusability Cost-effective for exporters using returnable crates.
- Stackability Easy to transport and store without damaging tomatoes.



Corrugated Fiberboard Boxes

Storage & Transportation Guidelines

- Temperature: 10°C 15°C to prevent chilling injury.
- Humidity: 85% 95% RH to maintain freshness.
- Stacking: Avoid overstacking to prevent crushing.
- Labeling: Must include variety, weight, origin, and handling instructions.

Corrugated Fiberboard Boxes

Corrugated fiberboard boxes are widely used for exporting tomatoes due to their durability, breathability, and stacking strength. They protect tomatoes from mechanical damage, temperature fluctuations, and moisture while ensuring smooth transportation.

Common Packing Weights

Box Size (L × W × H cm)	Packing Weight (kg)
Small Box (30 × 20 × 10 cm)	2 – 5 kg
Medium Box (40 × 30 × 15 cm)	7 – 10 kg
Large Box (50 × 40 × 20 cm)	12 – 15 kg
Bulk Box (60 × 40 × 25 cm)	15 – 25 kg





TOMATO PACKING METHODS IN CORRUGATED BOXES

- Loose Packing Tomatoes are placed freely inside the box.
- Layer Packing Tomatoes are arranged in layers with paper or dividers.
- Tray Packing Each tomato is placed in plastic or foam trays for premium markets.
- Cluster Packing Vine-ripened tomatoes are packed in bunches.

FEATURES & BENEFITS OF CORRUGATED FIBERBOARD BOXES

- Lightweight & Strong Reduces shipping costs while providing protection.
- Customizable Can be printed with brand logos and product details.
- Ventilated Design Ensures airflow to keep tomatoes fresh.



Wooden Crates

Storage & Transportation Guidelines

- Optimal Storage Temperature: 10°C - 15°C
- Avoid Chilling Injury: Temperatures below 8°C can cause softening, pitting, and flavor loss.
- Ripening Control: Green tomatoes can be stored at 13°C
 - 18°C for gradual ripening.

Wooden Crates for Tomato Exports

Wooden crates are a traditional and highly durable packaging option for exporting tomatoes. They provide excellent ventilation, stackability, and protection during long-distance transportation.

Common Packing Weights

Crate Size (L \times W \times H cm)	Packing Weight (kg)
Small (40 × 30 × 15 cm)	5 – 7 kg
Medium (50 × 35 × 20 cm)	10 – 12 kg
Large (60 × 40 × 25 cm)	15 – 20 kg
Extra Large (70 × 50 × 30 cm)	20 – 30 ka





ADVANTAGES OF WOODEN CRATES FOR TOMATO EXPORTS

- High Durability Protects tomatoes from crushing and impact.
- Ventilation Open slatted design prevents moisture buildup.
- Eco-Friendly & Reusable Sustainable and biodegradable.
- Stackability Strong structure allows easy transportation.
- Temperature Control Better airflow keeps tomatoes fresh longer.

PACKING METHODS FOR TOMATOES IN WOODEN CRATES

- Loose Packing Tomatoes placed freely inside the crate (best for Roma, Plum varieties).
- Layer Packing Arranged in layers with paper or dividers (best for premium exports).
- Cluster Packing Tomatoes kept in small bunches for high-end markets.



Clamshell or Plastic Containers

Storage & Transportation Considerations

- Temperature: 10°C 15°C to maintain freshness.
- Humidity: 85% 95% RH to prevent dehydration.
- Ventilation: Ensure proper airflow in storage & transport.
- Stacking: Use trays and dividers to avoid compression damage.

Clamshell & Plastic Containers

Clamshell and plastic containers are widely used for exporting premium-quality tomatoes, especially for cherry, grape, Roma, and vine-ripened tomatoes. These containers offer protection, visibility, and extended shelf life, making them ideal for retail and high-end markets.

Common Packing Weights

Container Type	Size (L \times W \times H cm)	Packing Weight (kg)
Small Clamshell	15 × 10 × 5 cm	250g – 500g
Medium Clamshell	18 × 12 × 6 cm	500g – 1kg
Large Clamshell	22 × 15 × 8 cm	1kg – 1.5kg
Bulk Plastic Container	30 × 20 × 10 cm	2kg – 2.5kg





ADVANTAGES OF USING CLAMSHELL & PLASTIC CONTAINERS

- Protection from Damage Prevents bruising and crushing.
- Enhanced Shelf Life Vented designs help regulate moisture and freshness.
- High Visibility & Branding Transparent material attracts buyers.
- Convenience for Consumers Easy to open, close, and store.
- Leakproof & Hygienic Reduces contamination risks during transit.

MARKET PREFERENCES & EXPORT CONSIDERATIONS

 Different countries and markets have specific preferences for clamshell and plastic container packaging for tomatoes. Understanding these preferences can help exporters maximize sales and meet regulatory requirements.



Storage & Transportation Considerations

- Temperature Control: 0°C -10°C (for fresh tomatoes under MAP) or room temperature (for dried/sealed products).
- Humidity Management: 80-95% RH to prevent dehydration.
- Vacuum Pressure Levels: Maintain 99% vacuum efficiency to prevent spoilage.

Vacuum-Sealed Packaging

Vacuum-sealed packaging is an advanced method used to extend the shelf life of tomatoes by removing oxygen from the package. This method is ideal for processed, semi-dried, or pasteurized tomatoes, but can also be applied to fresh-cut or peeled tomatoes under modified conditions.

Vacuum-Sealed Packaging

Common Packing Weights

Packaging Type	cm)	(kg)
Small Vacuum Bag	15 × 10 × 5 cm	250g – 500g
Medium Vacuum Pouch	20 × 15 × 6 cm	500g – 1kg
Large Vacuum-Sealed Bag	30 × 25 × 10 cm	1kg – 3kg
Rigid MAP Tray (Vented)	22 × 18 × 7 cm	1kg – 2kg
Glass Jar with Vacuum Seal	10 × 10 × 15 cm	250g – 1.5kg
Stand-Up Pouch with Vacuum	25 × 20 × 8 cm	500g – 2kg





ADVANTAGES OF USING VACUUM-SEALED PACKAGING

- Extended Shelf Life Prevents oxidation and microbial growth, keeping tomatoes fresh for longer.
- Maximum Freshness Retention Maintains color, texture, and nutritional value.
- Protection from Physical Damage – Airtight seal prevents bruising during transit.
- Space-Efficient & Lightweight Reduces shipping costs and storage space requirements.
- Leakproof & Hygienic Prevents contamination and moisture loss.

TYPES OF TOMATOES BEST SUITED FOR VACUUM SEALING

- Diced or Peeled Tomatoes Often used for food processing industries.
- Cherry & Grape Tomatoes Suitable for fresh-cut vacuumsealed trays.
- Sun-Dried & Semi-Dried Tomatoes

 Ideal for flexible vacuum
 pouches.
- Fresh-Cut Tomato Slices Used in pre-packaged salads and fast-food chains.