

PACKAGING SPECIFICATIONS FOR EXPORTS

TINDOLA (*Coccinia grandis*)

KANTOLA (*Momordica dioica*)

BRINJAL (SMALL) (*Solanum melongena*)

BITTER GOURD (*Momordica charantia*)



TINDOLA - KANTOLA - BRINJAL (SM

DIRECT BULK PACK

TINDOLA / KANTOLA / BRINJAL (SMALL) / BITTER GOURD

Corrugated Fibreboard Box

Capacity : 5 Kg

A. Minimum Specifications

Material of Construction*	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
External Dimensions (mm)	400 x 200 x 150	400 x 200 x 150	400 x 200 x 150	400 x 200 x 150
Style of Box**	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
No. of Plies	3.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
Type of Flutes	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
Direction of Flutes	Vertical	Vertical	Vertical	Vertical
Grammage (g/m ²) Outer to Inner (Indicative)	250 / 150 / 150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150
Burst Factor of Paper (Kraft) (Minimum)	20.0	20.0	20.0	20.0
Bursting Strength of Board (Kg/cm ²) (Minimum)	11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0
No. of Pieces per Box	Not more than two	Not more than two	Not more than two	Not more than two
Manufacture's Joint	By gluing	By gluing	By gluing	By gluing
Compression Strength of Box (Kgf) (Minimum)	350	350	350	350
COBB (30 Minutes)*** (g/m ²) (Maximum)	60	60	60	60
No. of Ventilation Holes	16.0	16.0	16.0	16.0
Diameter (mm) and Position of Holes	20.0	20.0	20.0	20.0
Two Sides Each	3	3	3	3
Two Ends Each	1	1	1	1
Top & Bottom Each	4	4	4	4

B. Recommended Specifications

Edge Crush (Kgf) (Minimum)	40.00	40.00	40.00	40.00
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*Outer ply of white duplex board or bleached kraft

**Or any other suitable style which provides equal strength and performance

***Outer ply to be laminated or coated for water proofing

Note: • Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.

- Grammage mentioned is indicative. However, any other grammage which provides equal strength and performance can be used.
- Diameter and no. of holes should be 20mm and 16 nos. respectively. However, sufficient ventilation depending upon the box style could also be used.



ALL) - BITTER GOURD



Corrugated Fibreboard Box

Capacity : 10 Kg

A. Minimum Specifications

Material of Construction*	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
External Dimensions (mm) Kantola / Brinjal (Small) / Bitter Gourd	500 x 300 x 200	500 x 300 x 200	500 x 300 x 200	500 x 300 x 200
Tindola	400 x 300 x 180	400 x 300 x 180	400 x 300 x 180	400 x 300 x 180
Style of Box**	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
No. of Plies	5.0	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 5
Type of Flutes	B / B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B / B(Narrow)
Direction of Flutes	Vertical	Vertical	Vertical	Vertical
Grammage (g/m ²) Outer to Inner (Indicative)	250 / 120 / 120 / 120 / 120	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/120/120/ 120 / 120
Burst Factor of Paper (Kraft) (Minimum)	20.0	20.0	20.0	20.0
Bursting Strength of Board (Kg/cm ²) (Minimum)	14.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 11.0	Lid : 11.0 Tray : 14.0
No. of Pieces per Box	Not more than two	Not more than two	Not more than two	Not more than two
Manufacture's Joint	By gluing	By gluing	By gluing	By gluing
Compression Strength of Box (Kgf) (Minimum)	450	450	450	450
COBB (30 Minutes)*** (g/m ²) (Maximum)	60	60	60	60
No. of Ventilation Holes	16.0	16.0	16.0	16.0
Diameter (mm) and Position of Holes	20.0	20.0	20.0	20.0
Two Sides Each	3	3	3	3
Two Ends Each	1	1	1	1
Top & Bottom Each	4	4	4	4

B. Recommended Specifications

Edge Crush (Kgf) (Minimum)	40.00	50.00	50.00	50.00
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*Outer ply of white duplex board or bleached kraft

**Or any other suitable style which provides equal strength and performance

***Outer ply to be laminated or coated for water proofing

- Note:
- Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.
 - Grammage mentioned is indicative. However, any other grammage which provides equal strength and performance can be used.
 - Diameter and no. of holes should be 20mm and 16 nos. respectively. However, sufficient ventilation depending upon the box style could also be used.



TINDOLA - KANTOLA - BRINJAL (SM)

DIRECT BULK PACK

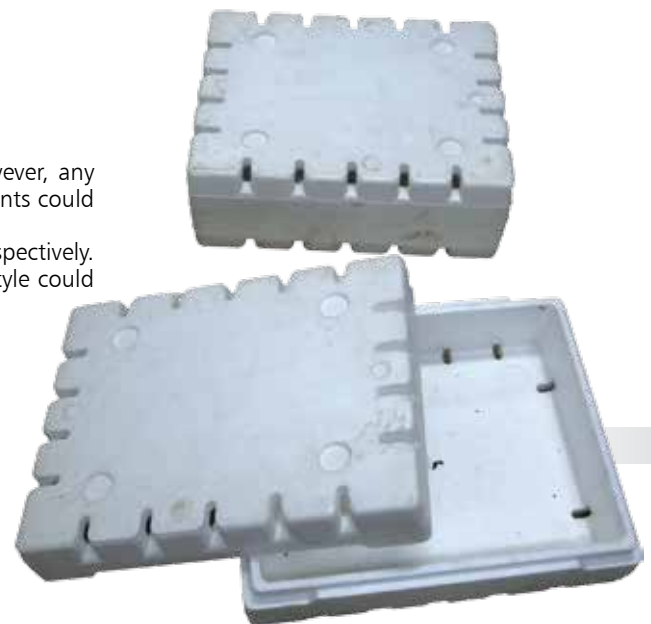
Expanded Polystyrene Box

Capacity: 5 Kg

Material of Construction	Expanded Polystyrene
External Dimensions (mm) Brinjal (Small) / Bitter Gourd	485 x 350 x 155
Tindola / Kantola	390 x 320 x 180
Style of Box*	Lid & Tray
Density of EPS (Kg / m ³) (Minimum)	18.00
No. of Pieces per Box	Not more than two
Compression Strength (Kgf) (Minimum)	300.00
No. of Ventilation Holes	16.00
Diameter (mm) & Position of Holes	20.00
Two Sides Each	3
Two Ends Each	1
Top & Bottom Each	4
or Equivalent Ventilation	

*Or any other suitable style with equal strength and performance

- Note:
- Dimensions of the box are modular to Euro pallets. However, any other dimensions or box styles to suit importers requirements could also be used.
 - Diameter and no. of holes should be 20mm and 16 nos. respectively. However, sufficient ventilation depending upon the box style could also be used.



Specification Details for Reinforcement Material

Pressure Sensitive Tape

- Material of Construction BOPP or PVC
(Biaxally Oriented Polypropylene or Poly Vinyl Chloride)
- Thickness 20 μ
- Width (Minimum) 50 mm
- Adhesive Property As per IS:3676-1986

For further specification details refer IS:2880-1978

Reinforcement Strap

- Material of Construction PP (Polypropylene)
- Width (Minimum) 12 mm
- Thickness (Minimum) 0.05 mm
- Breaking Load (Minimum) 80 Kg / 12 mm width
- Elongation (Maximum) 25%



APEDA and IIP: A Joint Initiative

Packaging is a co-ordinated system of preparing goods for transport, distribution, storage, retailing and end use.

The need for quality packaging for distribution and marketing of food products can hardly be over emphasised. With the thrust on promotion of exports, it is imperative that adequate attention be paid to packaging and logistics.

A comprehensive set of specifications for packaging of fresh fruits and vegetables is essential to help farm producers to effectively market their produce in a safe and cost-effective manner - in the domestic as well as export markets.

The Agricultural and Processed Food Products Export Development Authority (APEDA) and the Indian Institute of Packaging (IIP), have made efforts in the direction of developing packaging standards for fresh fruits, vegetables and as per the international requirements.

The packaging standards drawn up by the IIP would immensely help the exporters in procuring quality packaging materials and ensuring safe delivery of the produce to the destination markets.



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Specifications developed by IIP for APEDA



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