



# PACKAGING SPECIFICATIONS FOR EXPORTS

SNOW PEAS (Pisum sativum var. saccharatum)

SNAP PEAS (Pisum sativum var. macrocarpon)

ASPARAGUS (Asparagus officinalis)

**CHERRY TOMATOES** 

(Solanum lycopersicum var. cerasiforme)







#### **DIMENSIONS OF CONSUMER PACK**

## **SNOW PEAS / SNAP PEAS**

### A) Flexible Plastic Pouch

Capacity	Empt	Empty Pouch*		Filled Pouch*		
	Length (I) (mm)	Width (b) (mm)	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)	
250 grams	250	195	190	160	60	
500 grams	350	225	245	195	60	

<sup>\*</sup> Includes 5 mm seal width on sides and bottom

### B) Plastic Punnet with Lid

Capacity		Punnet Size				
		Tray			Lid	
	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)
250 grams	190	115	60	To fit the tray	To fit the tray	25
500 grams	190	115	110	To fit the tray	To fit the tray	15

## C) EPS Tray Stretch Wrapped

Capacity		Tray Size	
	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)
250 grams	245	145	40

## **CHERRY TOMATOES**

### A) Flexible Plastic Pouch

Capacity	Em	Empty Pouch*		Filled Pouch*		
	Length (I) (mm)	Width (b) (mm)	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)	
250 grams	240	150	165	130	30	

<sup>\*</sup> Includes 5 mm seal width on sides and bottom

### **B) Plastic Punnet with Lid**

Capacity		Punnet Size				
		Tray			Lid	
	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)
250 grams	190	115	40	To fit the tray	To fit the tray	25

## C) EPS Tray Stretch Wrapped

Capacity		Tray Size	
	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)
250 grams	200	125	35



## **ASPARAGUS**

## A) Flexible Plastic Pouch

Capacity	Empty	/ Pouch*		Filled Pouch*	
	Length (I) (mm)	Width (b) (mm)	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)
200 grams	310	170	180	145	20

<sup>\*</sup> Includes 5 mm seal width on sides and bottom

## **B) EPS Tray Stretch Wrapped**

Capacity		Tray Size	
	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)
400 grams	245	300	100

## C) Stretch Wrapped in Bunches

Capacity			
	Length (I) (mm)	Width (b) (mm)	Height (h) (mm)
200 Grams	360	65	35







#### **CONSUMER PACK**

### A. Flexible Pouches (250 gms, 500 gms.)

Material of Construction : LDPE (Low density Polythene ) or PP (Polypropylene)

Thickness ( $\mu$ ) : 37.5 or 25 Type of pouch : Pillow pouch Seal Width (Minimum) : 5 mm

Note:

1. Tolerance

a) Permissible Lower Level: Polythene film (-1.0%)

Polypropylene film (-1.0%)

b) Upper Level

A higher specification (positive tolerance) always could be acceptable but however should not lead to high rigidity, flex crack or reduced seal strength. A higher specification may add to the cost.

- 2. The material could be transparent/opaque coloured as per the requirements of the importer.
- 3. The material used shall be food grade and pass the prescribed Indian Standard / Standards if any and as demanded by the importing countries.
  - 1. Printing requirements shall conform to as prescribed by the importing countries.
  - 2. General Observations:
    - a) The pouches shall be clean and without any foreign particle.
    - b) The seal width shall be minimum 5 mm, particularly the top seal (for filled pouches )
    - c) The pouches shall be either reverse or surface printed. In case of surface print, the print shall be compatible with the product and shall not lift or smudge. The print shall be legible and easy to read.

### B. Plastic Punnet (250 gms, 500 gms.)

Material: Food grade PET (Polythene Terepthalate)

Note: The lid should sit firmly on the tray and should be lockable type.

#### C. Stretch Film

Material of construction : Food grade, Odourless, Stretchable

: LDPE (Low density Polythene )

or

: LLDPE (Linear low density Polythene )

or

: PVC (Poly Vinyl Chloride) film.

Thickness ( minimum ) ( $\mu$ ) : 15.00

### D. Expanded Polystyrene Tray

Material of construction : EPS (Expanded Polystyrene)

Density (g/cc) : 0.08

Thickness : Not more than 5 mm



#### TRANSPORT PACK FOR CONSUMER PACKS

### **ASPARAGUS**

Type of Consumer Pack	Flexible Plastic Pouch / Stretch Wrapped in Bunches	EPS Tray Wrap	pped
Capacity of Consumer Pack	200 grams	400 g	rams
A. Minimum Specifications			
Material of Construction*	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board
External Dimensions (mm)	400 x 300 x 60	500 x 300 x 100	500 x 300 x 100
Style of Box**	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312
No. of Plies	Lid - 3 Tray - 3	Lid - 3 Tray - 3	Lid - 3 Tray - 3
Type of Flutes	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)
Direction of Flutes	Vertical	Vertical	Vertical
Grammage (g/m²) Outer to Inner (Indicative)	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	20	20
Bursting Strength of Board (Kg/cm²) (Minimum)	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
Manufacturer's Joint	By gluing	By gluing	By gluing
Compression Strength of Box (Kgf) (Minimum)	350	350	350
COBB (30 Minutes)*** (g/m²) (Maximum)	60	60	60
No. of Ventilation Holes	16.0	16.0	16.0
Diameter (mm) and Position of Holes	20.0	20.0	20.0
Two Sides Each	3	3	3
Two Ends Each	1	1	1
Top & Bottom Each	4	4	4
B. Recommended Specification	ns		
Edge Crush (Kgf) (Minimum)	30	30	30

<sup>\*</sup>Outer ply of white duplex board or bleached kraft

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.

<sup>\*\*</sup>Or any other suitable style which provides equal strength and performance

<sup>\*\*\*</sup>Outer ply to be laminated or coated for water proofing

#### TRANSPORT PACK FOR CONSUMER PACKS

## **SNOW PEAS / SNAP PEAS**

Type of Consumer Pack	Flexible Plas	stic Pouch	Plastic Punnet With Lid		
Capacity of Consumer Pack	250 grams	500 grams	250 grams	500 grams	
A. Minimum Specifications					
Material of Construction*	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	
External Dimensions (mm)	500 x 400 x 140	500 x 400 x 140	500 x 400 x 95	500 x 400 x 135	
Style of Box**	RSC - 0201	Telescopic - 0312	One piece tuck-in-type	One piece tuck-in-type	
No. of Plies	3	Lid - 3 Tray - 3	3	3	
Type of Flutes	B (Narrow)	Lid B (Narrow) Tray B (Narrow)	B (Narrow)	B (Narrow)	
Direction of Flutes	Vertical	Vertical	Vertical	Vertical	
Grammage (g/m²) Outer to Inner (Indicative)	250/150/150	Lid : 250/150/150 Tray : 250/150/150	250/150/150	250/150/150	
Burst Factor of Paper (Kraft) (Minimum)	20	20	20	20	
Bursting Strength of Board (Kg/cm²) (Minimum)	11.0	Lid : 11.0 Tray : 11.0	11.0	11.0	
No. of Pieces per Box	Not more than two	Not more than two	Not more than two	Not more than two	
Manufacturer's Joint	By gluing	By gluing	By gluing	By gluing	
Compression Strength of Box (Kgf) (Minimum)	350	350	350	350	
COBB (30 Minutes)*** (g/m²) (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	S				
Edge Crush (Kgf) (Minimum)	30	30	25	25	

<sup>\*</sup>Outer ply of white duplex board or bleached kraft

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.

<sup>\*\*</sup>Or any other suitable style which provides equal strength and performance

<sup>\*\*\*</sup>Outer ply to be laminated or coated for water proofing



## **SNOW PEAS / SNAP PEAS**

Type of Consumer Pack	EPS Tray Stretch Wrapped		
Capacity of Consumer Pack	250 grams	500 grams	
A. Minimum Specifications			
Material of Construction*	Corrugated Fibre Board	Corrugated Fibre Board	
External Dimensions (mm)	500 x 300 x 100	500 x 400 x 140	
Style of Box**	Telescopic - 0306	Telescopic - 0312	
No. of Plies	Lid - 3 Tray - 3	Lid - 3 Tray - 3	
Type of Flutes	Lid B (Narrow) Tray B (Narrow)	Lid B (Narrow) Tray B (Narrow)	
Direction of Flutes	Vertical	Vertical	
Grammage (g/m²) Outer to Inner (Indicative)	Lid : 250/150/150 Tray : 250/150/150	Lid : 250/150/150 Tray : 250/150/150	
Burst Factor of Paper (Kraft) (Minimum)	20	20	
Bursting Strength of Board (Kg/cm²) (Minimum)	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	
Manufacturer's Joint	By gluing	By gluing	
Compression Strength of Box (Kgf) (Minimum)	350	350	
COBB (30 Minutes)*** (g/m²) (Maximum)	60	60	
No. of Ventilation Holes	16.0	16.0	
Diameter (mm) and Position of Holes	20.0	20.0	
Two Sides Each	3	3	
Two Ends Each	1	1	
Top & Bottom Each	4	4	
B. Recommended Specification	ıs		
Edge Crush (Kgf) (Minimum)	30	30	





#### TRANSPORT PACK FOR CONSUMER PACKS

### **CHERRY TOMATOES**

Type of Consumer Pack	Flexible Plastic Pouch / EPS Tray Stretch Wrapped						
Capacity of Consumer Pack	250 grams						
A. Minimum Specifications							
Material of Construction*	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board	Corrugated Fibre Board			
External Dimensions (mm)							
Flexible Plastic Pouch	500 x 400 x 140	500 x 400 x 140	500 x 400 x 140	500 x 400 x 140			
Eps Tray Stretch Wrapped	500 x 400 x 95	500 x 400 x 95	500 x 400 x 95	500 x 400 x 95			
Style of Box**	RSC - 0201	Telescopic - 0300	Telescopic - 0306	Telescopic - 0312			
No. of Plies	3	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/m²) 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	20	20	20			
Bursting Strength of Board (Kg/cm²) (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			
Manufacturer's Joint	By gluing	By gluing	By gluing	By gluing			
Compression Strength of Box (Kgf) (Minimum)	350	350	350	350			
COBB (30 Minutes)*** (g/m²) (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 Specification	ns						
Edge Crush (Kgf) (Minimum)	30	30	30	30			

<sup>\*</sup>Outer ply of white duplex board or bleached kraft

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.

<sup>\*\*</sup>Or any other suitable style which provides equal strength and performance

<sup>\*\*\*</sup>Outer ply to be laminated or coated for water proofing



## **CHERRY TOMATOES**

Type of Consumer Pack	Plastic Punnet With Lid			
Capacity of Consumer Pack	250 grams			
A. Minimum Specifications				
Material of Construction*	Corrugated Fibre Board			
External Dimensions (mm)	500 x 400 x 80			
Style of Box**	One piece tuck-in-type			
No. of Plies	3			
Type of Flutes	B (Narrow)			
Direction of Flutes	Vertical			
Grammage (g/m²) Outer to Inner (Indicative)	250/150/150			
Burst Factor of Paper (Kraft) (Minimum)	20			
Bursting Strength of Board (Kg/cm²) (Minimum)	11.0			
No. of Pieces per Box	Not more than two			
Manufacturer's Joint	By gluing			
Compression Strength of Box (Kgf) (Minimum)	350			
COBB (30 Minutes)*** (g/m²) (Maximum)	60			
No. of Ventilation Holes	16.0			
Diameter (mm) and Position of Holes	20.0			
Two Sides Each	3			
Two Ends Each	1			
Top & Bottom Each	4			
B. Recommended Specifications				
Edge Crush (Kgf) (Minimum)	25			







#### DIMENSIONS AND PLACEMENT OF CONSUMER PACKS IN TRANSPORT PACK

## SNOW PEAS / SNAP PEAS / CHERRY TOMATOES / ASPARAGUS

Type of Comsumer Pack	Capacity of Consumer Pack	Dimensions of Filled Pack L X B X H (mm)	External Dimensions of the Box L X B X H (mm)	Placement Pattern	Net Weight of Contents (Kg)
Snow peas / Snap peas					
Flexible Plastic Pouch	250 grams	190 x 60 x 60	500 x 400 x 140	3b x 2l x 2h	3
	500 grams	245 x 195 x 60	500 x 400 x 140	21 x 2b x 2 h	4
Plastic Punnet with lid	250 grams	195 x 120 x 75	500 x 400 x 95	4b x 21 x l h	2
EPS Tray stretch wrapped	250 grams	195 x 120 x 110	500 x 400 x 135	4 b x 21 x l h	4
	500 grams	245 x 145 x 40	500 x 300 x 100	2 l x 2 b x 2 h	2
Cherry Tomatoes					
Flexible Plastic Pouch	250 grams	165 x 130 x 30	500 x 400 x 95	31 x 2b x 2h	3
Plastic Punnet with lid	250 grams	195 x 120 x 60	500 x 400 x 80	4b x 21 x l h	2
EPS Tray stretch wrapped	250 grams	245 x 125 x 35	500 x 400 x 95	2 l x 2 b x 2 h	2
Asparagus					
Flexible Plastic Pouch	200 grams	180 x 145 x 20	400 x 300 x 60	2l x 2b x 2h	1.6
EPS Tray stretch wrapped	400 grams	245 x 300 x 100	500 x 300 x 100	2l x 2b x 2h	3.2
Stretch wrapped in bunches	400 grams	360 x 65 x 35	380 x 240 x 80	1l x 4b x2h	1.6

## **Specification Details of Reinforcement Materials**

## **Pressure Sensitive Tape**

Material Of Construction
 BOPP or PVC

(Biaxally Oriented Polypropylene

or

Poly Vinyl Chloride)

• Thickness 20  $\mu$ 

• 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 (min.)
 80 kg/12 mm width

Elongation (max.)

25%



## **Specification Details of Separator Plates**

Material Of Construction

Corrugated Fibre Board

• No. of Plies

-

• Type of Flute

B (Narrow)

Grammage (g/m²)

150/150/150

 Bursting Strength (kg/cm²) (minimum) 5.00



### 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 and vegetables** 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.



## कृषि और प्रसंस्कृत खाद्य उत्पादन निर्यात विकास प्राधिकरण

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)

## Agricultural and Processed Food Products Export Development Authority

(Ministry of Commerce and Industry, Govt. of India)

3rd Floor, NCUI Builidng, 3 Siri Institutional Area, August Kranti Marg (Opp. Asiad Village), New Delhi - 110 016 (INDIA).

Tel: +91-11-2651 3204 / 2651 4572 / 2653 4186

Fax: +91-11-2652 6187 E-mail: headq@apeda.com Website: www.apeda.gov.in

## **Regional Offices**

#### **Mumbai Office**

4<sup>th</sup> Floor, Unit NO. 3 & 4, Banking Complex Bldg. No. II, Sector 19 A, Vashi, Navi Mumbai 400 705

Tel: 022-27 84 09 49/27 84 54 42

Fax: 022-27 84 22 73

Email: apedamum@apeda.gov.in

#### **Hyderabad Office**

8<sup>th</sup> Floor, Chandra Vihar Bldg., M. J. Road, Hyderabad - 500 001.

Tel: 040-24 74 59 40 Fax: 040-24 74 59 47

Email: apedahyd@apeda.gov.in

## **Bangalore Office**

12/1/1, Palace Cross Road, Bangalore - 560 020.

Tel: 080-23 34 34 25/23 36 82 72

Fax: 080-23 36 45 60

Email: apedablr@apeda.gov.in

#### **Guwahati Office**

Housefed Complex, West End Block Building, 4<sup>th</sup> Floor, Beltola - Basistha Road, Dispur, Guwahat 2210 (Assam)

Tel: 0361-2340485 Fax: 0361-2599010

Email: apedagwh@apeda.gov.in

#### **Kolkata Office**

Mayukh Bhawan, Bidhan Nagar, Kolkata - 700 091.

Tel: 033-23 37 83 63 Fax: 033-40 66 92 91

Email: apedakol@apeda.gov.in

## Specifications developed by IIP for APEDA



E-2, MIDC Area, Post Box No. 9432, Andheri (E), Mumbai - 400 093. INDIA Tel: +91-22-2821 9803 / 6751 / 9469 Fax: +91-22-2837 5302 / 2825 4631 E-mail: iip@iip-in.com, Web: www.iip-in.com