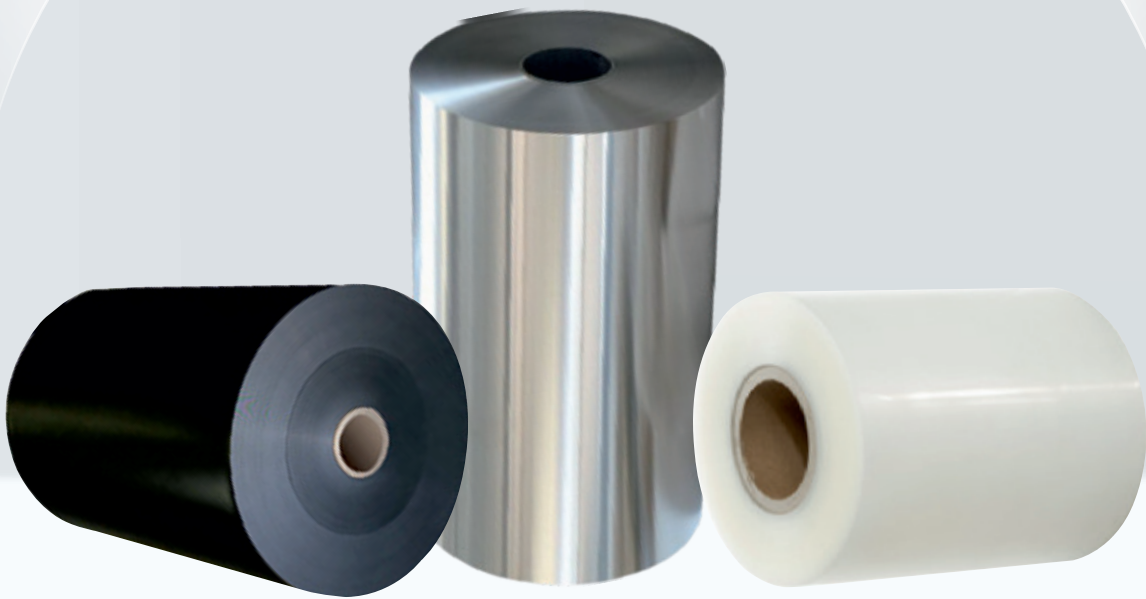


# Rigid Sheets



**Polyethylene Terephthalate (PET) Sheet**

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**Polypropylene (PP) Sheet**

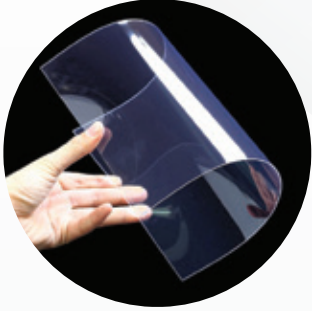
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**High Impact Polystyrene (HIPS) Sheet**

# Polyethylene Terephthalate (PET)

Polyethylene Terephthalate (PET) PET sheet is the abbreviation of Polyethylene terephthalate rigid sheet, chemical formula is  $(C_{10}H_8O_4)_n$  It is a highly transparent, brightness, high gloss with smooth surface. PET Products have good barrier properties, excellent oxidation resistance, chemical resistance. It is a common resin can be converted into its subcategory i.e. APET, RPET , GAG, PET G etc

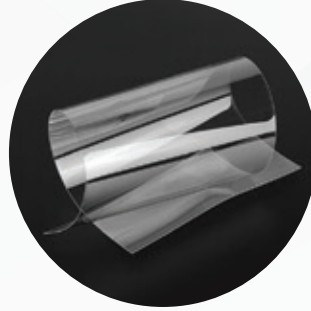
## PET Sheet Types :



**APET**



**RPET**



**GAG**



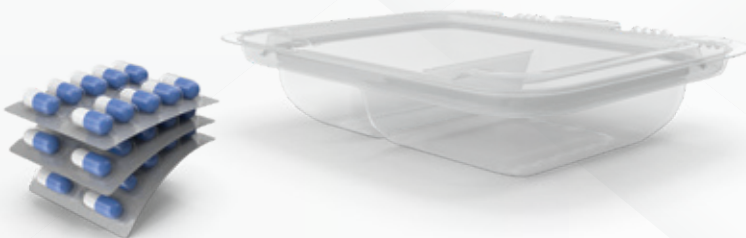
**PET G**

## APET Sheet Roll

PET sheet is the abbreviation of Polyethylene terephthalate rigid sheet, chemical formula is  $C_{10}H_8O_4n$  It is a highly transparent, brightness, high gloss with smooth surface. PET Products have good barrier properties, excellent oxidation resistance, chemical resistance. It is a common resin can be converted into its subcategory i.e. APET, RPET , GAG, PET G etc

## RPET Sheet Roll

Food Grade Recycled PET Sheet offers excellent light transmittance and mechanical strength, high resistance to oxygen and water vapor, customized cutting and special functional ESD additives, Metallizing high-end customization. ABA three-layer co-extrusion structure, in line PE Barrier with PET Thermal lamination and FDA food safety certification, widely used in Thermoforming ,food ,beverage and blister packaging industry.



## GAG Sheet Roll

The GAG sheet is a three-layer composite PET sheet. The middle layer is made of APET, and the upper and lower layers are made of PETG. The raw materials are co-extruded according to the appropriate ratio. It is especially suitable for packaging boxes that need to be bonded by high-frequency heat sealing and glue. It has cost advantages with GPET in surface properties, the GAG sheet forming cycle is short even at low temperatures and the yield is high. GAG sheets have very good impact resistance to prevent cracks. GAG sheets can be used for all applications of packaging.

## PETG Sheet Roll

PETG (Polyethylene Terephthalate Glycol), also known as GPET, is an amorphous PET resin modified with "cyclohexanedimethanol". Its melting point is relatively low, only 180°C to 200°C. PETG sheet has the characteristics of APET sheet & It is recyclable



## Application of PET Sheet

- Thermoforming / Vacuum forming
- Stationary & Garment Industry
- Fruits and Vegetables Trays / Boxes
- Cold Storage & Transportation of Meat & Fruits
- Printed / Non Printed Folding Boxes
- Automotive & Industrial Applications
- Medical & Pharmaceutical Packaging
- Electrical & Electronics Part Packaging
- Sealable PET Trays & Blisters



# Features of PET sheet

- Food grade and zero migration Material
- Non-toxic Less Contains of Heavy Metal Content
- High Clarity and Transparency
- High Gloss Material than any other Plastic
- Excellent Mechanical Strength, Stiffness, Hardness
- Excellent Water and Moisture Barrier Properties
- Very High Dimension Stability & Low shrinkage
- Easy Release and Stackable
- Easy to Thermoforming / Vacuum forming
- Chemical Resistance
- Eco friendly
- Easy to Recycle to Original Form
- Printable after Treatment
- Temp Range - 20° to 130°



## Technical Specifications :

S. No	Test Parameters	Test Method	UNIT	A-PET	R-PET	PETG	GAG PET	NV PET
1	Layer Structure	—		3 Layer	Mono Layer & 3 Layer	3 Layer	3 Layer	Mono Layer & 3 Layer
2	Density	ASTM-D 792	g/cm <sup>3</sup>	1.33	1.33	1.27	1.3	1.33
3	Thickness Range	ASTM-D 6988	Micron	150 to 1500	150 to 1200	150 to 1200	300 to 1200	200 to 1200
4	Roll Width (Min.-Max.)	ISO 4592	mm	300 - 1500				
5	Core ID	ASTM-D1968	mm	76 /152.4/203.2				
6	Roll Diameter (Max.)	—	mm	Max 1000				
7	Roll weight (Min.-Max.)	—	Kg	25- 500				
8	Colours	—	Visual	On Request				
9	Gloss	ASTM - D2457	%	>150	>140	>150	>150	>150
10	Melting point	—	°C	260 °C	251 °C	220 °C-260 °C	260 °C	260 °C
11	Surface tension (Treatment)	ASTM- D 2578	dyne/cm	≥ 38	≥ 38	≥ 38	≥ 38	≥ 38
12	Tensile strength	ASTM D882	Kg/m <sup>2</sup>	≥ 450	≥ 350	≥ 500	≥ 450	≥ 450
13	Process Applications Sheet	—	—	Fresh Fruits Segments , Thermoforming, Vacuum, Blister Forming, Box making cosmetics & Meat Packaging				
14	Specialty Sheet Applications	—	—	PET/ PE Barrier , Metallized rPET , Medical tray , Ant-fog , Anti-static, Printing & Lamination, PETG 3D printing ,Etc.				

## ESD Plastic Sheet (PET)

ESD trays protect electrical & electronic contents through a conductive surface that safely channels electrical charges to ground. This prevents static building up then suddenly discharging through sensitive components.

With proper use, ESD trays form a safe ecosystem protecting electronics from static discharges throughout handling and shipping. Electrostatic discharge (ESD) materials are usually divided into the following categories according to their characteristics:

### Conductivity to electrical charge

**Anti Static:**  $10^{10}$  to  $10^{11}$  Ohm/square

**Conductive:**  $10^3$  to  $10^5$  Ohm/square

**Static Dissipative:**  $10^6$  to  $10^9$  Ohm/square

### Features of ESD Sheet

- Antistatic sheet available in any Colour.
- Conductive and Dissipative sheet available in transparent and in any colour
- Suitable for All kinds of Electronic and Electrical packing Purpose.
- Helps in creating dustless Packing and similar applications.
- RoHS Compliance
- Recyclable

### Application of ESD Sheet

- Suitable for packing trays for Electronics and Electrical Goods
- IC & Chip trays
- Trays Suitable for Mobile & Component manufacturing
- Material Handling Trays for High Energy Material





# Technical Specifications :

## Conductive & Dissipative Sheets

Structure	Gauge / Thickness	Typical Gauge Variation	Width of Sheet	Core ID	Roll Outer Diameter	Surface Resistivity ohm/sq
Multi Layer	500 to 1800 micron	± 3%	Upto 800 to 900 mm ± 2 mm	76 / 152 & 203 mm	Upto 1000 mm	$10^3$ to $10^7$

## Anti Static Sheets

Structure	Gauge / Thickness	Typical Gauge Variation	Width of Sheet	Core ID	Roll Outer Diameter	Surface Resistivity ohm/sq
Multi Layer	500 to 1800 micron	± 3%	Upto 800 to 900 mm ± 2 mm	76 / 152 & 203 mm	Upto 1000 mm	$10^7$ to $10^{11}$



# Polypropylene (PP) Sheet

PP has established itself as the most versatile packaging material for food & non food applications. It can have possibility of Hot-fill, Microwavable applications. Due to it's better resistance to acids & moisture, PP is suitable for wide range of applications.

## Features of Polypropylene Sheet

- Good Transparency
- Higher mechanical strength
- Better rigidity at lower wall thickness
- Recyclable
- Microwavable & Hot-fillable



## End Use Segments

- Food packaging
- Thermoforming / Vacuum forming
- Microwavable / Hot-fill applications
- Lamination & Printing
- Box making & Stationary
- Blister packaging / FFS packs



# Technical Specifications :

S. No	Test Parameters	Test Method	UNIT	Standard Values with Tolerance
1	Layer structure	—	—	Mono and Multi layer , Two colours
2	Density	ASTM-D 792	g/cm <sup>3</sup>	0.9
3	Thickness Range	ASTM D 6988	Micron	350 to 2000
4	Roll Width	ISO 4592	mm	900
5	Treated Side	ASTM D5946	—	As on Request
6	Roll diameter	ASTM G194	mm	1000
7	Core ID	ASTM D1968	mm	76 / 152.4 /203.2
8	Roll Length	ISO 4592	meter	Max up to 1800 mtr.
9	Roll weight (Min.-Max.)	—	kg	25-500
10	Colours	Visual	—	Clear / White opaque / customized on request
11	Gloss (Matt Side)	ASTM - D2457	%	≥ 65
12	Gloss(Shine Side)	ASTM - D2457	%	≥ 95
13	Surface tension (Treatment)	ASTM D5946	Dyne/cm	≥ 40
14	Application	—	PP Barrier , Dairy segment , Fast food Meal tray , Thermoforming & Stationery application	
15	Specialty Sheet Applications	—	PP Barrier ,Freezer grade applications Etc.	





# High Impact Polystyrene (HIPS) Sheet

HIPS is a versatile, economical & impact resistant plastic that is easy to machine & thermoform. HIPS is often recommended when impact resistance, machinability & low cost are desired.

HIPS is also easy to Print, Seal and Glue.

## Features of High Impact Polystyrene (HIPS) Sheet

- Good rigidity
- High impact strength
- Higher mechanical strength
- Recyclability
- Outstanding Formability
- Easy to glue, paint and print



## End Use Segments

- Cosmetic packaging
- Thermoforming / Vacuum forming
- Wide range of Food / Non-food packaging
- Printing
- Stationary
- Pharmaceutical packaging



## Technical Specifications :

S. No	Test Parameters	Test Method	UNIT	Standard Values with Tolerance	ESD SHEET
1	Layer structure	—	NO	Mono Layer, 3 Layer & 5 layers, Two colours	3 Layer & Two colours
2	Density	ASTM-D 792	g/cm <sup>3</sup>	1.05	
3	Thickness	ASTM D 6988	Micron	350 to 2000 ( $\leq 3\%$ )	
4	Roll Width	ISO 4592	mm	900	
5	Treated Side	ASTM D5946	—	As on Request	
6	Roll diameter	ASTM G194	mm	1000 from 1200	
7	Surface Resistivity	ASTM D257	Ohm ( $\Omega$ )	customized spec	
8	Core ID	ASTM D1968	mm	76 / 152.4 / 203.2	
9	Roll Length	ISO 4592	meter	Max up to 1800	
10	Roll weight (Min. -Max.)	—	kg	25- 500	
11	Colours	Visual	—	Natural / opac / As per customer request	
12	Gloss (Matt Side)	ASTM - D2457	%	$\geq 15$	
13	Gloss (Shine Side)	ASTM - D2457	%	$\geq 80$	
14	Corona Treatment	ASTM D5946	Dyne/cm	on request	
15	Application	—	Dairy Segment ,Automobile ,Electronic Packaging and Thermoforming application		
16	Specialty Sheet Applications	—	ESD / Anti-static, Egg Tray Etc.		



# Technical Specification ESD Plastic Sheet (HIPS) :

## Conductive & Dissipative Sheets

Structure	Gauge / Thickness	Typical Gauge Variation	Width of Sheet	Core ID	Roll Outer Diameter	Surface Resistivity ohm/sq
Multi Layer	500 to 1800 micron	± 3%	Upto 800 to 900 mm ± 2 mm	76 / 152 & 203 mm	Upto 1000 mm	$10^3$ to $10^7$

## Anti Static Sheets

Structure	Gauge / Thickness	Typical Gauge Variation	Width of Sheet	Core ID	Roll Outer Diameter	Surface Resistivity ohm/sq
Multi Layer	500 to 1800 micron	± 3%	Upto 800 to 900 mm ± 2 mm	76 / 152 & 203 mm	Upto 1000 mm	$10^7$ to $10^{11}$



# About Us

Cosmo Plastech, a dynamic business unit of Cosmo First, excels in crafting end-to-end packaging solutions that are specifically designed for a diverse range of fast-moving consumer goods (FMCG) products. Our use of advanced technology sets us apart, ensuring precision and making our products moisture-resistant, tamper-proof, and delivers exceptional clarity. These qualities, highly valued in the food and beverage industry, set our solutions apart.

Working closely with clients, we understand and address their specific requirements and excel in designing and manufacturing customized containers/cups. With expertise in injection moulding and thermoforming solutions, made using innovative rigid sheets – PP, HIPS & PET. We stand out as a trusted global rigid sheets manufacturer, offering reliable, tailored packaging solutions that reflect our years of expertise and commitment to excellence.

## Installed Production Capacity

**BOPP Films:** 2,00,000 TPA  
**BOPET:** 30,000 MTPA  
**CPP Films:** 9,000 TPA  
**Thermal Films:** 40,000 TPA  
**Coated Films:** 25,000 TPA  
**Metalized Films:** 30,000 TPA  
**CSP:** 7200 TPA  
**Rigid Packaging:** 10000 TPA

## Infrastructure\*\*

**9 BOPP Production Lines\***  
**1 BOPET Line**  
**2 CPP Lines\*\***  
**8 Extrusion Coating Lines**  
**6 Gravure Coating Lines**  
**5 Metalizers\*\*\***  
**7 Thermal Lines**  
**2 Sheet Extrusion lines**  
**2 Thermoforming lines**  
**12 Injection moulding machine**

## Certifications

**ISO 9001: 2015**  
Quality Management System  
**BRCGS**  
Global Standard For Packaging  
Material System  
**ISO 14001 : 2015**  
Environment Management System  
**FSSC 22000**  
Food Safety System Certification

\* 10th BOPP line to be commissioned by 2025  
\*\*3rd CPP Line to be commissioned by 2024  
\*\*\*2 Metalizers to be commissioned by 2023



**CORPORATE OFFICE**  
Delhi



**MANUFACTURING FACILITIES**  
India : 3



**SALES OFFICES**  
India: 6 | US | Germany |  
Korea | Japan



**CUSTOMER FOOTPRINTS**  
100 Countries



**WAREHOUSES**  
Canada: 1 | US: 7 | Korea: 1 |  
Japan: 1 | Germany: 2 | Mexico: 1

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**COSMO PLASTECH**  
Designed to protect