

# **COSMO SYNTHETIC PAPER**

Engineered to enhance longevity

The Choice of Modern-Age Commercial Printers



# Cosmo Synthetic Paper

It is a co-extruded, white opaque, polypropylene based film which resembles paper in appearance. It is printable with most available printing technologies which include Conventional/Wet & UV Offset, Wet & UV Flexo, Letterpress, Screen, Thermal Transfer and Digital Printing (HP Indigo technologies & Dry Toner printing technologies).

Synthetic paper is a replacement of paper in applications where durability and longevity is desired. It is non-tearable, water and oil resistance and excellent lay flatness. The versatility of synthetic paper is reflected in the vast number of applications where it can be used. This includes areas such as commercial printing, tags & labels, retail & packaging, identification & credentials and outdoors.

Cosmo Synthetic Paper is EU 10/2011, USFDA, REACH, RoHS compliant and ISCC certified.

Grades	Product Code	Product Description			Avail Thick					Sizes
CSP Classic (Grade-1) Available in Sheet and Reel	CSPR-2/ CSPS-2 (M)	Standard Synthetic paper (Uncoated)	Microns GSM MIL Microns GSM MIL	95 69 3.8 215 155 8.6	120 88 4.8 275 202 11.0	106 6.0 330 231	175 127 7.0 375 266 15.0	305		Maximum Width (Sheet) 1200mm Maximum Width (Reel) 1750mm
CSP Unicoat (Grade-2) Available in Reel	CSPR-2 (M) TC	Top Coated Synthetic paper	Microns  GSM  MIL	95 72 3.8	120 98 4.8	150 109 6.0	123	190 136 7.6	146	Maximum Width (Reel) 1580mm
CSP Dualcoat (Grade-3) Available in Sheet and Reel	CSPR-2/ CSPS-2 (M) BTC	Both Side Coated Synthetic paper	Microns GSM MIL Microns GSM MIL Microns GSM MIL Microns	356 243	10.0	6.0 275 197 11.0 406 287	132 7.0 305 211 12.0 435 299	234 13.2 510 345		Maximum Width (Sheet) 1200mm Maximum Width (Reel) 1580mm
CSP FlexoTuff (Grade-4) Available in Reel	CSPR-2 (M) FLEXI  CSP FLEXI  CSP FLEXI APPROVED*	Both Side Coated High Tear Resistance Synthetic paper	Microns  GSM  MIL	125 126 5.0	150 146 6.0	200 198 8.0	250 246 10.0			Maximum Width (Reel) 1580mm
CSP DigiLux (Grade-5) Available in Sheet and Reel	CSPR-2/ CSPS-2 (M) HR BTC	Both Side Coated Laser Printable Synthetic Paper (Natural Shade)	Microns  GSM  MIL	227	280 321 11.0	371	397	423		Maximum Width (Sheet) 1200mm Maximum Width (Reel) 1580mm
CSP DigiLux-MW (Grade-6) Available in Sheet and Reel	CSPR-2/ CSPS-2 (M) MW BTC	Both Side Coated Laser Printable Synthetic Paper (White Shade)	Microns  GSM  MIL	150 164 6.0		227	251	280 321 11.0		Maximum Width (Sheet) 1200mm Maximum Width (Reel) 1580mm
CSP PSP (Grade-7) Available in Sheet and Reel	CSPR-2/ CSPS-2 (M) PSP	Both side Coated Laser Printable PET based Synthetic Paper (White Shade)	Microns  GSM  MIL	115 164.5 6.5	-					Maximum Width (Sheet) 1200mm Maximum Width (Reel) 1580mm

CSP Classic (Grade-1)

**Available in** Sheet and Reel

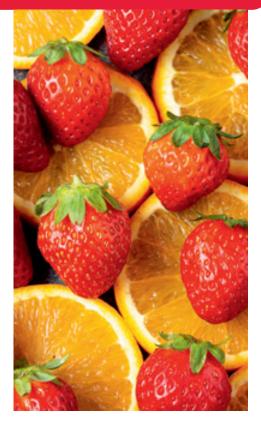
CSP Unicoat (Grade-2) Available in Reel

CSP Dualcoat (Grade-3)

**Available in** Sheet and Reel



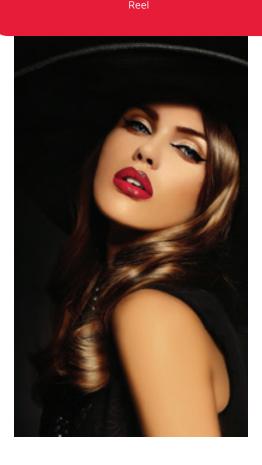




CSP FlexoTuff (Grade-4) Available in Reel

CSP DigiLux (Grade-5) Available in Sheet and Reel

CSP DigiLux-MW (Grade-6) Available in Sheet and Reel







# **Print Process Compatibility Matrix**

Print Process		CSP Classic CSPR-2 (M)	CSP Unicoat CSPR-2 (M) TC	CSP Dualcoat CSPR-2 (M) BTC	CSP FlexoTuff CSPR-2 (M) FLEXI	CSP Digilux CSPR-2 (M) HR BTC	CSP DigiLux-MW CSPR-2 (MW) BTC	CSP PSP CSPR-2/ CSPS-2 (M) PSP
Conventional Offset		Yes (Recommended to use fast curing inks for best results)	Yes	Yes	No	Yes	Yes	Yes
UV Offset		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Screen		Yes	Yes	Yes	No	Yes	Yes	Yes
Flexography (UV based inks)		No	Yes	Yes	Yes	Yes	Yes	Yes
Flexography (W	Flexography (Water based inks)		Yes	Yes	Yes	Yes	Yes	Yes
Thermal Tra	Thermal Transfer (TTR)							
Compatib	Compatible Ribbons							
Resin	Wax Resin		Yes	Yes	Yes	Yes	Yes	Yes
Ricoh B110CR	Ricoh B110A	No*						
Armor AXR 7+	Armor AXR FH 7+							
Mastercorp TTR Z400								

Printing compatible even with local brands (Resin and Wax-Resin ribbons). It is recommended to check suitable speed and energy combination while printing with different ribbons (wax resin/resin ribbons) for optimum results.

Letterpress	No	Yes	Yes	No	Yes	Yes	Yes
HP Indigo 3000, 5000, 6000, 7000 ser, 10000, 12000, 15000 & 25000	No	Yes	Yes	No	Yes	Yes	Yes
Water & Solvent based Inkjet	No	No	No	No	No	No	No
UV Inkjet (HP Scitex FB 550)	No	Yes	Yes	No	Yes	Yes	Yes
HP - Latex	No	Yes	Yes	No	Yes	Yes	Yes
Laser Printer (Dry Toner) production printers Xerox,Konica Minolta, Ricoh, Kodak, Canon	No	No	No	No	Yes	Yes	Yes

CSP - Cosmo Synthetic Paper TC - Top Coated BTC - Both Side Coated MW - More White HR - Heat Resistance

# Converting Recommendations for CSP

# O1 Die Cutting

Before going for die cutting, following points need to be taken into consideration:

- Blades to be used should be sharp enough and free from nicks
- Avoid right angles & sharp corners as it may cause tearing
- Right angle cuts should be made with a 1/16th inch radius hole
- Use double beveled blade

#### 02 Punching

It is possible to be done on CSP but to obtain best results, it is recommended to use round holes rather than square shaped as they may lead to tearing

#### 03 Perforation

It is recommended to use  $\leq$  0.5 mm tie (joint between two cuts) and the cut portion should be  $\geq$  2.0 mm to avoid any wander. Optimum pressure should be applied on the die for seamless cutting

# 04 Hot Foil Stamping

CSP is suitable for hot foil stamping

#### O5 Folding

- Though folding is possible to be done on CSP, scoring is recommended for better results
- To achieve flatness after folding, it is recommended to keep CSP under nipping for minimum 30 minutes

#### O6 Adhesive Compatibility & Lamination

It is recommended to use hot melt adhesive or any other suitable high tack adhesive for bonding with CSP. It is suitable for thermal lamination process

## 07 Guillotining

While doing guillotining on CSP, ensure that the blades are sharp and clean

# **Commercial Printing**

#### Applications

- Maps & Calendars
- Posters
- Coasters & Table Mats
- Hospital Folders

Recommended Microns: 120-510

- Brochures & Leaflets
  - Photo Albums
  - Menu Cards
  - · Children's Books & Religious Books
  - Gaming Cards



# Tags & Labels



- Annlicatio
- Food & Pharma Packaging LabelsElectronic Appliances Labels
- Apparel & Footwear Tags/Labels
- Chemical Drum Labels
- Paint & other Container Labels
- Construction Site Stickers

Recommended Microns: 75-510

# Applications

- Warning Labels on Appliances
- Airport Transfer Tags
- Wristbands
- Track & Trace Labels
- Steel Bar Tags

# Retail & Packaging

#### Applications

- POP Graphics
- Posters
- Indoor Billboards
- Banners
- Backlit Displays

Recommended Microns: 175-510

- Shelf Talkers
- Danglers
- Shelf Labels



# **Identification & Credentials**



#### Applications

- Visiting Cards
- Healthcare & Insurance Cards
- Marksheets & Certificates
- Birth Certificates

Recommended Microns: 175-510

- Membership Cards
- Driver's License
- Voter ID Cards
- Legal Documents

# **Printing Recommendations for CSP**

# Offset Printing

Printing on CSP by offset printing method requires certain care. This is so because the mechanism of ink drying on normal paper follows absorption as well as oxidation on the surface but on CSP, the ink dries due to surface oxidation only. Hence, drying takes longer time as compared to art paper/card. Generally, when the material does not dry fast, it gives rise to ink set off problems. Therefore, special care must be taken to ensure quick drying to avoid ink set off.

### Flexographic Printing

- To avoid misregistration, set the tension at the lowest possible level
- Adjust the settings to ensure that the paper surface temperature never exceeds 80°C, and immediately after putting the paper through the dryer, cool the surface of CSP to as close to room temperature as possible

# Digital Printing HP Indigo/Liquid Toner

- Care needs to be taken for choosing the correct media selection settings
- We recommend thorough testing of the material in its intended application prior to use

#### Thermal Transfer (TTR)

- Thermal transfer printing is a process that uses heat to create an impression on the print media. It uses a carbon ribbon that upon heating is moved
- Top coated and both sides coated CSP is compatible to be printed through thermal transfer printing

#### Digital Laser printing (Dry Toner)

- Do proper fanning of sheets prior to load in tray
- $\bullet$  It is recommended to involve the service engineer for media Settings
- If require adjust image transfer current to get good quality print result

# **About Us**

Cosmo Films is a global leader in specialty films for packaging, lamination, labelling and synthetic paper. With engineering of innovative products and sustainability solutions, Cosmo Films over the years has been partnering with worlds' leading F&B and personal care brands and packaging & printing converters to enhance the end consumer experience. With state-of-the-art manufacturing facilities in India and Distribution, warehousing & sales offices in different parts of the world, the company has been at the forefront of developing customer-centric solutions to deliver the finest product and service experience, backed by innovation, people, and processes.

#### **Installed Production Capacity**

**BOPP Films: 1,96,000 TPA** 

CSP: 7,200 TPA CPP Films: 27,000 TPA BOPET Films: 30,000 TPA PET G Films: 12,000 TPA Thermal Films: 26,000 TPA Coating Films: 36,000 TPA

Metalized Films: 40,000 TPA

# Infrastructure

10 BOPP Production Lines

2 CSP Line 3 CPP Lines 1 BOPET Line

6 Thermal Lamination Lines

8 Gravure Coating Lines

10 Metalizers

#### 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 Certificationt

ISCC - International Sustainability and Carbon Certification.

# Sustainable Manufacturing Practices

The Company is committed to environmentally friendly and socially responsible manufacturing processes. Cosmo strives to establish a sustainable manufacturing model by:

- 1. Reusability Cosmo Synthetic paper is made of polypropylene and is therefore 100% reusable in category 5 (PP).
- 2. Environment Friendly Cosmo synthetic paper has no impact on forest resources it is 100% Tree Free.
- 3. The Cosmo manufacturing process uses very less water than traditional paper production, thus preserving water resources.
- 4. Regeneration of waste/scrap material to be used as input for production.
- 5. Recycling of paper cores and use of plastic and aluminum cores for in-house requirements, resulting in reduced use of paper core.
- 6. Partnering with customers for packaging structure rationalization to reduce material consumption.



MANUFACTURING FACILITIES

India: 3

SALES OFFICES India: 6 | US: 1 | Germany: 1 Japan: 1 | Korea: 1



CUSTOMER FOOTPRINTS 100+ Countries



WAREHOUSES

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

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