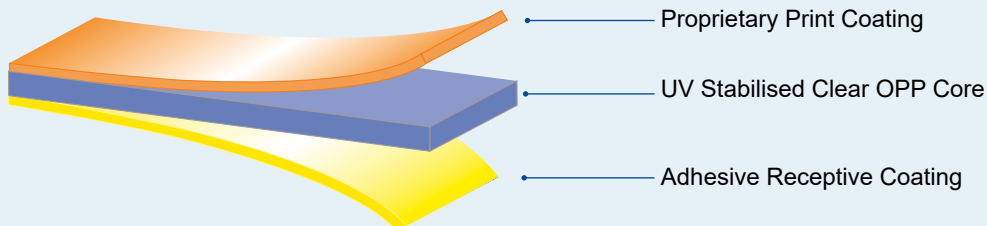


Rayoart™ CGS

Technical Data Sheet

CGS - Clear, High Gloss, Two Side Coated, Biaxially Oriented Polypropylene Film with Enhanced UV Stability, for Graphic Art or Label Applications.

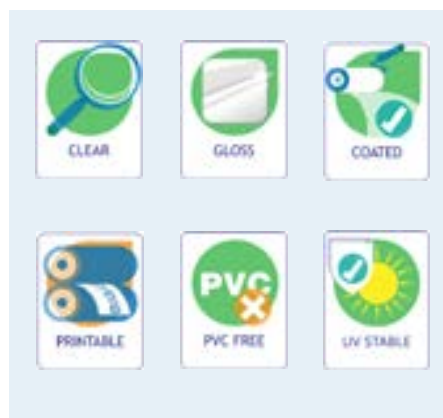


Features

- UV stabilised for outdoor applications
- High clarity, giving excellent definition in window graphic applications
- Extremely easy to apply and remove at low and high temperatures
- High resistance to tearing during handling
- Excellent printability with conventional printing systems
- Reverse side coating gives enhanced adhesive anchorage
- High stability during adhesive lamination and printing processes
- Balanced biaxial orientation for superior die cutting of decals and stickers
- Recyclable with polyolefin materials
- Excellent hot/cold moisture resistance

Printability

Rayoart™ CGS has a proprietary top coating which gives outstanding print performance. The highly functional surface gives wide ink and process capability and enhances ink adhesion and scratch resistance to the final printed graphic. Suitable for sheet-fed UV and traditional offset and screen processes when converted on paper-based release liners. For wide-format digital processes, Rayoart™ CGS gives excellent performance with UV inkjet. Rayoart™ CGS is NOT suitable for HP Latex or solvent/eco-solvent inkjet processes. The print surface is compatible with wide range of adhesives for over-lamination processes. Always consult your adhesive and ink supplier for recommendations.



Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	CGS		
Thickness	Innovia Films test		micron	60	92	
			gauge	230	360	
Yield	Innovia Films test		m ² /kg	18.4	12.0	
			in ² /lb	13000	8400	
			g/m ²	54.3	83.3	
Optical: Gloss Haze (wide angle)	Innovia Films test	45°	%	90		
		2.5°		<3.0		
Tensile strength	ASTM D 882	Strain rate 50%/min	MN/m ²	MD	200	190
				TD	180	170
			kpsi	MD	29	27.5
				TD	26	24.6
Elongation at break	ASTM D 882	Strain rate 50%/min	%	MD	105	130
				TD	120	140
Elasticity modulus (1% secant)	ASTM D 882	Strain rate 10%/min	MN/m ²	MD	2400	2000
				TD	2200	1900
			kpsi	MD	348	290
				TD	319	276
Dimensional stability	Innovia Films test	10 min at 70°C (158°F)	%	MD	0.3	
				TD	-0.4	
UV resistance	ASTM G154	Continuous Dry Exposure: 0.84W/m ² @ 340nm, 50°C/122°F, 50%RH		> 3000hrs		
		Dry: Wet Cycle Exposure: 4 hrs @ 0.84W/m ² @ 340nm, 50°C/122°F, 50%RH 4 hrs @ 50°C/122°F, 100%RH		> 3000hrs		
Outdoor durability	Vertical Applications*	Central Europe		4 Yrs		

*Unconverted film
MD Machine Direction TD Transverse Direction
All properties are tested under standard laboratory conditions: 23 ± 2°C, 50 ± 5% RH, (73 ± 4°F, 50 ± 5% RH), unless otherwise stated. Where relevant, tests are based on international testing standards.
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Rayoart™ CGS

Technical Data Sheet

Conversion

High speed web processing of Rayoart™ CGS is very stable due to low elongation, high machine direction stiffness and excellent web flatness. The adhesive receptive coating is compatible with a wide range of water-based, solvent-based and hot-melt pressure sensitive adhesives – enhancing film-to-adhesive key and allowing clean peel removability. The balanced properties of Rayoart™ CGS give excellent cutting performance allowing crisp clean edges and smooth curves. Tear initiation resistance is very high. Where possible corner cuts and internal angles should have a radius. Plasticiser and migratory additive-free, Rayoart™ CGS allows enhanced adhesion and consistent peel stability through the lifetime of the applied graphic. Low elongation and high tear resistance supports fast clean removal of the graphic at the end of a campaign.

Reel Specifications

Nominal Reel Diameters

Film	Core Size/(mm)	Approx Outside Dia/(mm)	Length/(metres)
CGS60	153	877	9300
CGS92	153	873	6000

Film	Core Size/(in)	Approx Outside Dia/(in)	Length/(feet)
CGS230	6	32	30500
CGS360	6	34.3	19700

Alternative reel lengths are available subject to negotiation.

The printable surface of Rayoart™ CGS is available on either the inner or outer surface of the wound roll.

Film Storage and Handling

Care should be taken to protect reels of film from storage temperatures above 30°C (86°F) and localised sources of heat above 45°C (113°F). The reels should remain in the protective coverings supplied until ready for use on converting machinery. Converted reels, in both master and slit reel form should be similarly protected at all times. Rayoart™ CGS is suitable for use for 6 months from the date of delivery and stocks should be used in rotation. Films should be allowed to reach operating room temperatures for 24 hours before use.

Food Contact

Rayoart™ CGS does not comply with either EU or US legislation for direct contact with food. For specific enquires please contact our Technical Services Department.

Health & Safety Guidelines

For Health & Safety information, please refer to literature reference L190.

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