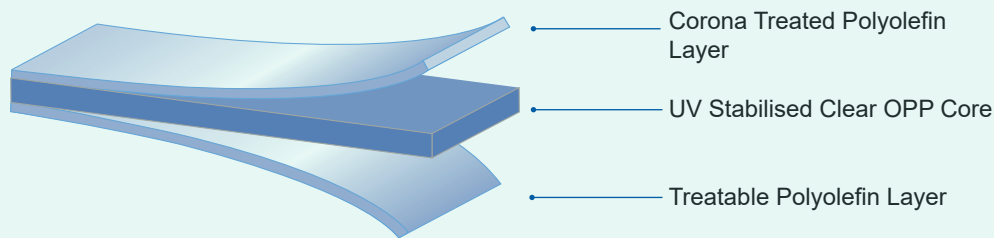


# Rayoart™ GCL

## Technical Data Sheet

**GCL** - Clear, High Gloss, Biaxially Oriented Polypropylene Film with Enhanced UV Stability, for Graphic Art or Label Applications.



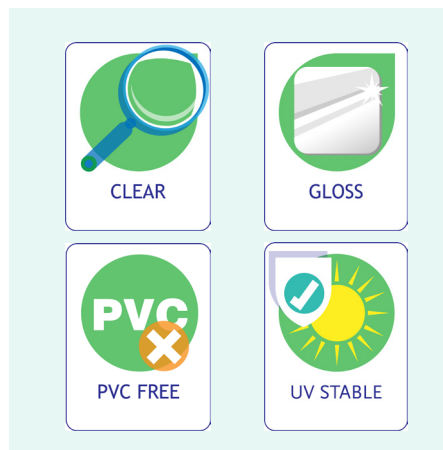
### Features

- 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
- High stability during adhesive lamination and printing processes
- Balanced biaxial orientation for superior die cutting of decals and stickers
- Recyclable with polyolefin materials

### Applications

**Rayoart™ GCL** is designed to be used as a gloss over-laminate film and is not intended to be printed.

GCL can be used as a base film for subsequent coating, with coating onto the corona treated surface.



### Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	GCL		
Thickness	Innovia Films test		micron	58	90	
			gauge	230	360	
Yield	Innovia Films test		m <sup>2</sup> /kg	18.9	12.3	
			in <sup>2</sup> /lb	13300	8600	
			g/m <sup>2</sup>	52.9	81.3	
Optical: Gloss	ASTM D 2457	45°		85	85	
				ASTM D 1003	2.5°	<2
Tensile strength	ASTM D 882	Strain rate 50%/min	MN/m <sup>2</sup>	MD	200	190
				TD	180	170
			kpsi	MD	29.0	27.5
				TD	26.1	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 <sup>2</sup>	MD	2400	2000
				TD	2200	1900
			kpsi	MD	345	290
				TD	319	276
Dimensional stability	Innovia Films test	70°C (158°F)/10min		MD	0.3	
				TD	-0.4	
Surface tension (corona treated surface)			Dyne/cm	>38		
UV resistance	ASTM G154	Continuous Dry Exposure: 0.84W/m <sup>2</sup> @ 340nm, 50°C/122°F, 50%RH		> 3000hrs		
		Dry: Wet Cycle Exposure: 4 hrs @ 0.84W/m <sup>2</sup> @ 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 ± 4F, 50 ± 5% RH), unless otherwise stated. Where relevant, tests are based on international testing standards. Rayoart™ GCL - 1 of 2 - 0822

# Rayoart™ GCL

## Technical Data Sheet

### Conversion

The balanced stiffness and strength of Rayoart™ GCL allows high speed conversion during adhesive lamination and printing. The same feature provides excellent die cutting performance, enhancing film edge appearance and prolonging die life.

### Reel Specifications

#### Nominal Reel Diameters

Film	Core Size/(mm)	Approx Outside Dia/(mm)	Length/(metres)
GCL58	153	860	9300
		621	4650
GCL90	153	864	6000
		621	3000

Film	Core Size/(in)	Approx Outside Dia/(in)	Length/(feet)
GCL230	6	33.9	30500
		24.4	15250
GCL360	6	34.0	19700
		24.4	9850

Alternative reel lengths are available subject to negotiation.

Corona treatment is available on either the inner or outer surface of Rayoart™ GCL.

### 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™ GCL 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. For specific enquiries, please refer to our graphic arts market development department.

### Food Contact

Rayoart™ GCL complies with the applicable EU legislation for most applications involved in direct contact with food. Details are given on Declaration of Compliance. Customers intending to use Rayoart™ GCL in food contact application should request a copy of this document from Innovia Films.

### Health & Safety Guidelines

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

**Disclaimer:** Innovia Films or any of its affiliated companies (hereinafter 'Innovia Films') declines any liability with respect to the use made by any third party of the information contained herein. The information contained herein represents Innovia Films' best knowledge thereon without constituting any express or implied guarantee or warranty of any kind (including, but not limited to, the accuracy, the completeness or relevance of the data set out herein). Innovia Films is the sole owner or authorised user of the intellectual property rights relating to the information communicated. The information relating to the use of the products is given for information purposes only. No guarantee or warranty is provided that the product is adapted to the client's specific use. The client should perform his own tests to determine the suitability for a particular purpose. The final choice of use of a product remains the sole responsibility of the client.

Rayoart™ GCL – 2 of 2 – 0822

#### Regional Offices:

Europe (UK) Tel +44 16973 42281  
Americas (USA) Tel +1 800 424 6273  
Asia-Pacific (Aus) Tel +61 3 9303 0600

[www.innoviafilms.com](http://www.innoviafilms.com)  
email: [graphics@innoviafilms.com](mailto:graphics@innoviafilms.com)  
™Trademark of Innovia Films

