

# ecoelement™ CLS GLOSS / MATTE

## SUSTAINABLE THERMAL LAMINATE FILM



**EcoElement CLS**, a 1.4 mil sustainable laminate film by Nobelus, is a bio-based film made with PEFC certified wood pulp. Additionally, every production run is manufactured with 20-25% of reprocessed cellulose film. The cellulose film used to make **CLS** has successfully passed vigorous evaluation criteria. **EcoElement CLS** is a choice thermal laminate film for print projects that require environmental excellence all while maintaining the highest quality in performance and durability.

### KEY BENEFITS

- Sustainably Sourced Bio-Based Film
- Made with PEFC Certified Wood Pulp
- Brilliant Gloss and Low Haze (Gloss)
- Low Glare and Non-Reflective (Matte)
- Adheres to Most Substrates
- Total Satisfaction Gold Seal Guarantee™

### BASE FILM

- Biodegradable and Home Compostable
- OK Compost Home Seal from TUV Austria
- ISO 14001 Certified and BPI Certified

### POST-LAMINATE PERFORMANCE\*

- Die-Cutting
- Glueable
- Emboss-Friendly
- Folding
- Stampable
- Offset, UV and Screen Printable

### COMMON APPLICATIONS

- Folded Carton Packaging
- Electronics Packaging
- Consumer Goods Packaging
- Secondary Cosmetic Packaging
- Liquor and Luxury Product Packaging
- Gift Packaging
- Flexible Packaging

Properties	Side	Gloss	Matte	Units	Test Method / Standard
Film Type and Thickness		1.4 CLS	1.4 CLS	Mil	N/A
Weight		39.2	39.2	g/m <sup>2</sup>	N/A
Yield		17,928	17,928	in <sup>2</sup> /lb	DIN 53375
Gloss Level at 60°		144.3	8.5	GU	ASTM D523
Dyne Level	GL/ML	38-42		Dyne	ASTM D2578
Coefficient of Friction	FS	0.4-0.65	0.35-0.55	μk	ASTM D1894
Application Temperature		194-212 (90-100)		°F (°C)	Various Equipment- Always Test
Lamination Tensile Strength	MD	8,700	8,700	PSI	ASTM D882
	TD	N/A	N/A	PSI	
Elongation at Break	MD	25-45	25-45	%	ASTM D882
	TD	N/A	N/A	%	
Thermal Shrinkage (239°F for 10 min.)	MD	1.5	1.5	%	ASTM D1204
	TD	N/A	N/A	%	
Moisture Vapor Transmission Rate		N/A	N/A	N/A	N/A
Oxygen Transmission Rate		N/A	N/A	N/A	N/A

MD = Machine Direction TD = Transverse Direction GL = Gloss Layer ML = Matte Layer  
FS = Film Surface GU = Gloss Units ASTM = American Standard Test Method

\* Testing recommended for all post-laminate finishing.

**Note:** The information given on this specification sheet is believed to be true and accurate and is not intended to violate any statutory condition or right of a third party. Nobelus makes no warranty, express or implied, as to the fitness of the products for any specific use or purpose. The above data is purely for reader's consideration, investigation and verification.

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