

## ECOELEMENT™ GLOSS & MATTE CLS THERMAL LAMINATE (LFCGH & LFCMH)

These films meet the definition of an article under the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), the European Union (EU) Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Standard, United States (US) Occupational Health and Safety Administration (OSHA) Hazard Communication Standard, Canadian Workplace Hazardous Materials Information System (WHMIS) Regulation and Australian Work Health and Safety (WHS) Regulation.

Therefore, under normal usage of these products, a Material Safety Data Sheet (MSDS) is not required and will not be issued by our vendor.

To support our customers with additional data on safe handling and use instructions for our manufactured articles this Safe Use Instruction Sheet was created.

SECTION 1: Material Identification	
Product Name	EcoElement Gloss & Matte CLS Thermal Laminate
Recommended Use	Lamination
Distributor Name	Nobelus 4841 Lumber Lane Knoxville, TN 37921
Emergency Phone Number	800.895.2747
SECTION 2: Hazard Identification	
Potential Hazards	Clear, Smooth flat sheets. (similar safety hazards to paper).
Unusual Fire & Explosion Hazards	Supports combustion
SECTION 3: Composition / Information on Ingredients	
A flexible packaging material consisting of 0.8 mil cellulose diacetate film and nominal 0.4 mil EVA adhesive, suitable for thermal ('dry') lamination. Materials of this type have been widely used for many years, with no adverse reactions reported. The principle components are cellulose diacetate (CA), ethylene vinyl acetate (EVA) and glycerol triacetate (triacetin).	
SECTION 4: First Aid Measures	
Following Inhalation	Not Applicable
After Eye Contact	No adverse effects anticipated.
After Skin Contact	No adverse effects anticipated.
After Ingestion	No adverse effects anticipated.
Important Symptoms and Effects, Both Acute and Delayed	No adverse effects expected on prolonged exposure.
SECTION 5: Fire Fighting Measures	
Suitable Extinguishing Agents / Equipment	Water, Carbon Dioxide, Foam, Dry Powder, Sand.
Special Exposure Hazards arising from the Substance itself, Combustion Products, or Resulting Gases	Carbon Monoxide, Carbon Dioxide, Acetic Acid, Water
Special Protective Equipment for Fire Fighters	As with any fire, use breathing apparatus in presence of smoke/fumes.
SECTION 6: Accidental Release Measures	
Methods for Containment and Cleanup	Loose waste and scrap material should be swept up for safe disposal.

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SECTION 7: Handling and Storage	
Precautions for Safe Handling	Avoid damage to the edge of the roll. NEVER stand rolls on end, avoid placing or rolling rolls on the floor. Handle rolls using mandrels inserted into the core. Store by suspending on racks using mandrels. Do not hammer mandrels into the core.
Conditions for Safe Storage including Incompatibilities	Keep all rolls in their moisture-proof wrapping until required for processing. Re-wrap partially used and slit rolls. Suspend the rolls on racks by rods through the cores. Avoid “walking” rolls on one end as the edges will become damaged. Avoid wide variations in temperature and humidity in the storeroom. Temperatures between 59°F - 73°F (15°C–23°C) and a relative humidity between 40% - 65% are the best conditions. Avoid exposure to ketone and ester solvent vapors such as acetone or ethyl acetate. Do not store in bright sunlight.
Shelf Life	As a general rule, EcoElement CLS should be processed promptly. We would recommend that customers process EcoElement within 12 months of its receipt. Particularly for hot and/or humid climates, and where the film is supplied as narrow reels (12” or less), it is recommended to convert EcoElement CLS within 6 months of receipt. In case of problems after such periods, we reserve the right not to offer compensation in respect of problems arising with film quality.
SECTION 8: Exposure Controls / Personal Protection	
Special Requirements for PPE	None
Appropriate Engineering Controls / Ventilation	Fume extraction and fresh air circulation is recommended where solvents are being used during lamination or other finishing processes.
SECTION 9: Physical and Chemical Properties	
Appearance / Color	Rolled Film
Odor	Practically Odorless
Viscosity: Dynamic / Kinematic	Not applicable
Specific Gravity	1.12 ± 0.02
Solubility / Miscibility with Water	Insoluble
SECTION 10: Stability & Reactivity	
Reactivity / Solvent Resistance	Low resistance to ketones and esters. Attacked by moderate to concentrated strong acids and bases. Resistant to non-polar solvents.
Thermal Decomposition / Conditions to Avoid	Cellulose diacetate film decomposes circa 482°F (250°C). EVA ‘melts’ for lamination ~ 194°F (90°C)
SECTION 11: Toxicological Information	
Material of this type has been in use for many years. There have been no chronic, short- or long-term effects reported. Specific toxicological tests films have not been conducted. However, practical experience and literature surveys for the key components reveal the following information:	
Primary Irritant Effects on the Skin	No adverse effects anticipated.
Primary Irritant Effects on the Eye	Normal discomfort resulting from foreign bodies in the eye.
Primary Irritant Effects upon Inhalation	Not Applicable
Primary Irritant Effects upon Ingestion	8600 mg/kg (rat) for Cellulose diacetate; 3000 mg/kg (rat) for glycerol triacetate

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SECTION 12: Ecological Information	
Ecological & Aquatic Toxicity	This product is not expected to be harmful for the environment.
SECTION 13: Disposal Considerations	
General Comment	Disposal should be in accordance with applicable regional, national and local laws and regulations.
SECTION 14: Transport Information	
The material is not regulated for transport and shipping purposes. Materials packed on pallets should not be broken down during shipment.	
SECTION 15: Regulatory Information	
NFPA Grade	No Data Available
Federal Regulations	No Data Available
State Regulations	No Data Available
SECTION 16: Other Information	
Last Revision	April 2021
Training Instructions	None Known
Data Sources	Data provided is from Manufacturer's SDS Sheets.