

LUXEFILMS® MIRROR METALIZED™ PRINTABLE THERMAL LAMINATE FILM

SECTION 1: Material Identification

Product Name	LuxeFilms Mirror Metalized Printable Laminate Film
Recommended Use	Thermal Laminating
Uses Advised Against	Do not use in medical applications involving permanent implementations in the human body.
Distributor Name	Nobelus 4841 Lumber Lane Knoxville, TN 37921
Emergency Phone Number	800.895.2747

SECTION 2: Hazard Identification

Hazard Classification	No Data Available
Signal Word	No Data Available
Hazard Statements	Unlikely to cause harmful effects under normal conditions of handling and use.
Pictograms	No Data Available
Precautionary Statements	No Data Available
CAS Hazard Class	Not Regulated
% of Product with Unknown Acute Toxicity	No Data Available
Unusual Fire & Explosion Hazards	No Data Available
Label Elements	No Data Available

The film can pick up a strong static charge during processing. Avoid discharge into dust or solvent as a flash fire or explosion may result.

SECTION 3: Composition / Information on Ingredients

Chemical Name and Synonyms	Main film = Polyethylene Terephthalate (PET) film vacuum metallized with Aluminium metal Coating = Low Density Polyethylene, LDPE Poly Ethylene Vinyl Acetate, EVA
CAS No	No Data Available
Concentrations	No Data Available
Impurities & Stabilizing Additives	No Data Available
Trade Secret Claims	No Data Available
Formula	PET = [-OC-C6H4-COOCH2 O-]n LDPE = [-CH2-CH2-]n EVA = [-CH2-CH-COOCH3-] n

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SECTION 4: First Aid Measures	
General Information	No toxic reactions in humans. Note to Physicians: Prolonged eye irritation may occur from the pieces of debris sticking to the eyeball or eyelids.
Following Inhalation	No specific information is indicated as the compound is not likely to be hazardous by inhalation. However if exposed to fumes from overheating or combustion, remove patient from exposure. Obtain medical attention if ill effects occur.
After Eye Contact	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After Skin Contact	If molten product comes in contact with skin, cool rapidly with cool water. Do not attempt to remove the material from skin. Obtain medical attention if ill effects occur.
After Ingestion	Unlikely to be required but if necessary treat symptomatically.
Important Symptoms and Effects, Both Acute and Delayed	No Data Available
Recommendations for Immediate Medical Care / Special Treatment	No Data Available
SECTION 5: Fire Fighting Measures	
General Information	Combustible but not readily ignited. Unlikely to ignite except in high heat flux conditions.
Suitable Extinguishing Agents / Equipment	Foam, Dry Powder, Carbon Dioxide, Water
Unsuitable Extinguishing Agents / Equipment	No Data Available
Special Exposure Hazards arising from the Substance itself, Combustion Products, or Resulting Gases	Combustion will evolve toxic and irritant vapors. These vapors are comparable to those of many natural products such as wood. At complete combustion the major products formed will include oxides of carbon and water; during incomplete combustions a complex range of volatile organic compounds including trans esterification, combustion, reaction products and lower levels of hydrocyanic acid will be formed in addition to carbon dioxide, water and carbon monoxide.
Special Protective Equipment for Fire Fighters	Wear a Breathing Apparatus
Fire Fighting Procedures and Precautions	Thin film (<23 micron) will shrink away from the heat sources or flame. Burning is accompanied by melting and dropping which may cause the fire to spread.
SECTION 6: Accidental Release Measures	
Personal Precautions, Protective Equipment and Emergency Procedures	No Data Available
Environmental Precautions and Protective Procedures	No Data Available
Methods for Containment and Cleanup	Scrap film generated through processing, e.g. slitting/shredding, should be swept up and disposed of in drums or plastic bags according to local regulations.

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SECTION 7: Handling and Storage	
Precautions for Safe Handling	Hand gloves are recommended for handling the film. Avoid skin contact with sharp film edges. Roll may telescope; handle with caution.
Conditions for Safe Storage including Incompatibilities	Store in a cool and dry, smell free place with original packing until use. Packages are kept closed to prevent contamination. The film rolls should not be stored near to pungent odoring substances or solvents. Temperature and humidity should be controlled at 77°F - 95°F (18°C -25°C) and less than 85% RH, respectively. Bare (opened) rolls are recommended to be handled at the condition of 64.4°F - 77°F (18°C -25°C) and less than 65% RH.
Shelf Life	As the thin metallized layer is likely to be easily oxidized in the presence of moisture, the rolls are to be used as soon as possible after opening of the package. It is advisable to use metallized films within six months from delivery. The metallized rolls may be good condition even further if stored properly at recommended conditions in its original packing.
Precautions against Fire and Explosion	No Data Available
SECTION 8: Exposure Controls / Personal Protection	
Control Parameters	No Data Available
Permissible Exposure Limits (PELs)	Polyethylene Terephthalate: No OSHA exposure limits are set up.
ACGIH Threshold Limit Values (TLVs)	No Data Available
General Information Regarding PPE	No Data Available
Hand, Skin, and Body Protection	Cotton gloves are appropriate to handle the Polyethylene Terephthalate film. Gloves must be changed every month.
Eye Protection	It is recommended to use safety goggles as good industrial practice.
Respiratory Protection	No Data Available
Special Requirements for PPE	No Data Available
Appropriate Engineering Controls / Ventilation	No specific ventilation is required.
Thermal Hazard Protection	Take measures to avoid electrostatic charges. Sufficient static electricity removal system must be in place during processing and use of the film; all such static electricity removal system should be grounded as per standard norms. Keep away from ignition sources. Observe the general rules of industrial fire protection.
SECTION 9: Physical and Chemical Properties	
Appearance / Color	Clear / Transparent
State of Matter	No Data Available
Upper / Lower Flammability Limits	No Data Available
Upper / Lower Explosive Limits	Not Applicable
Odor	Odorless
Odor Threshold	No Data Available
Vapor Density	No Data Available
pH	Not Applicable
Relative Density	No Data Available

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SECTION 9: Physical and Chemical Properties Cont.

Melting Point/ Melting Range	203°F - 500°F (95°C-260°C)
Freezing Point / Freezing Range	No Data Available
Solubility(ies)	No Data Available
Initial Boiling Point / Boiling Range	No Data Available
Flash Point	No Data Available
Evaporation Rate	No Data Available
Density	1.00 - 1.4 g/cm ³
Relative Density	No Data Available
Flammability (solid, gas)	No Data Available
Partition Coefficient (N-Octane / Water)	No Data Available
Auto-Ignition Temperature	> 752°F (400 °C)
Viscosity: Dynamic / Kinematic	Not Applicable
Decomposition Temperature	572°F (300°C)
Danger of Explosion	No Data Available
Vapor Pressure	Not Applicable
Specific Gravity	No Data Available
Spontaneous Combustion	Negligible Volatile Content
Solubility / Miscibility with Water	Not Soluble
Solvent Content	No Data Available
Oxidization	No Data Available
Distribution Coefficient	No Data Available
Molecular Weight	No Data Available
Softening Point	Metalized PET Film: > 482°F (250°C) LDPE Coating Film: > 266°F (130°C) EVA Coating: > 194°F (90°C)
Specific Heat (KJ/Kg)	1.34 at 77°F (25°C)
Thermal Conductivity (W/Mk)	0.14
Heat of Combustion (MJ/Kg)	23.5
Additional Toxicological Information	No Data Available

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SECTION 10: Stability & Reactivity	
Reactivity	The material is non volatile.
Chemical Stability	Stable at room temperature
Possibility of Hazardous Reactions	None
Thermal Decomposition / Conditions to Avoid	> 482°F (250°C); Avoid temperature above 464°F (240°C), strong acid and alkali.
Incompatible Materials	No Data Available
Hazardous Decomposition Products	Carbon Monoxide, Carbon Dioxide, Aldehydes, Ketones and Alcohols.
Hazardous Polymerization	This material is not known to have any hazardous polymerization characteristics.
SECTION 11: Toxicological Information	
Acute Toxicity	Very low toxicity for aquatic environment is predicted on the basis of negligible solubility of film in water.
Primary Irritant Effects on the Skin	Film is not a skin irritant.
Primary Irritant Effects on the Eye	Film may be an irritant to the eye.
Primary Irritant Effects upon Inhalation	No Data Available
Primary Irritant Effects upon Ingestion	No Data Available
Delayed, Immediate, and Chronic Effects from Exposure	No adverse effects for long or short term contact is know.
Symptoms	No Data Available
Carcinogen Information: if Listed in NTP or IARC	No Data Available
Sensitization	No Data Available
STOT (Specific Target Organ Toxicity): Single and Repeated Exposure	No Data Available
SECTION 12: Ecological Information	
Ecological & Aquatic Toxicity	No Data Available
Persistence and Degradability	Film is not biodegradable.
Bioaccumulative Potential	No Data Available
Mobility in Soil / Argonomical Movement	No Data Available
Other Hazardous Effects	No Data Available
Additional Ecological Information	Many years of experience show that this product is not hazardous to the environment.
SECTION 13: Disposal Considerations	
Disposal Method and Precautions	Can be disposed of or incinerated with normal household waste, after consultation with site operators and local authorities. Mechanical recycling is possible.
Recommended Cleansing Agents	No Data Available
Contaminated Packaging	Scrap film generated through processing, e.g. slitting/shredding, should be swept up and disposed of in drums or plastic bags according to local regulations.
General Comment	Dispose according to Local, Federal, and State Regulations.
Refer to Section 8 for more information regarding minimizing exposure and protection.	

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SECTION 14: Transport Information	
UN Number	No Data Available
UN Proper Shipping Name	No Data Available
Transport Hazard Class(es)	Not classified as hazardous for transport.
Class	No Data Available
Packing Group Number	No Data Available
Environmental Hazards	No Data Available
Marine Pollutant	No Data Available
Special Precautions for User	No Data Available
UN "Model Regulation"	No Data Available
Bulk Transport Regulations	No Data Available
SECTION 15: Regulatory Information	
NFPA Grade	Health: 1 Flammability: 1 Reactivity: 0
NFCA - HMIS Grade	Health: 0 Flammability: 1 Reactivity: 0
Clean Air Act Status	This product does not contain and is not produced with ozone depleting chemicals as defined in 58 FR 8136, February 11, 1993.
State Regulations	No Data Available
SECTION 16: Other Information	
Last Revision	June 2020
Training Instructions	None Known
Data Sources	Data provided is from Manufacturer's SDS Sheets.