Material Safety Data Sheet

Polyester Thermal Lamination Metalized Film

Distributor Name:

GVDirect™

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	SECTION 1: Material Identification
Product Name	Talent Brilliant Mirror PET 1.1 mil
Chemical Name	Main Film = Polythylene Terephthalate, **PET** film vacuum metalized with Aluminium metal Coating = Low Density Polyethylene, **LDPE,** Poly Ethylene Vinly Acetate, **EVA**
Formula	**PET** = $[\text{-OC-C}_6\text{H}_4\text{-COOCH}_2\text{ O-}]_n$ **LDPE** = $[\text{-CH}_2\text{-CH}_2\text{-}]_n$ **EVA** = $[\text{-CH}_2\text{ -CH-COOCH}_3\text{ -}]_n$
CAS Hazard Class	Not Regulated
CAS No	PET (25038-59-9), LDPE (9002-88-4), EVA (24937-78-8)
Issue Date	13th January 2020

	SECTION 2: Hazardous Components
	Unlikely to cause harmful effects under normal conditions of handling and use Occupational Exposure Limits The following values apply to nuisance dust which may be formed during cold processing (e.g. cutting, grinding, stamping)
Total Dust	10 mg/m3 (8hr TWA)
Respiratory Dust	5 mg/m3 (8hr TWA)

	SECTION 3: Health Hazards Information
General Remarks	No toxic reactions in human known
Inhalation	No specific information in indicated as the compound is not likely to be hazardous by inhalation
Ingestion	Non-Toxic
Eye Contact	Mechanical irritation only
Skin Contact	No skin problem is anticipated during handling the film

Material Safety Data Sheet

Polyester Thermal Lamination Film

	SECTION 4: Emergency First Aid Procedure
Inhalation	If exposed to fumes from overheating or combustion, remove patient from exposure. Obtain medical attention if symptoms persist.
Eye Contact	Flush eyes with plenty of water. Consult a physician if symptoms persist.
Skin Contact	Wash skin with plenty of water & soap. If molten polymer contacts skin, cool rapidly with water. Don't peel polymer from skin, get medical attention for thermal burn.
Ingestion	Unlikely to be required but if necessary treat symptomatically
	Note to physicians: Prolonged eye irritation may occur from the pieces to debris sticking to the eyeball or eyelids

	SECTION 5: Fire-Fighting Measures
	Suitable extinguishing media : Foam, Dry Powder, Carbon Dioxide, Water. Combustible but not readily ignited Unlikely to ignite except in high heat flux conditions 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 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 oxidise 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 Protective equipment for fire-fighting : wear a breathing apparatus

	SECTION 6: Accidental Release Measures
	Scrap film generated through processing, e.g. slitting/shredding be swept and disposed of on drums or plastic bags according to local regulations.

	SECTION 7: Handling and Storage
Prevention of fire & explosion	Take measure 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 Hand gloves are recommended for handling the film. The material is non volatile no specific ventilation is required. Avoid skin contact with sharp film edges.

Material Safety Data Sheet

Polyester Thermal Lamination Film

SECTION 7: Handling and Storage Continued

Storage Conditions

Store in cool & dry, smell free place with original packing until use. As the thin metalized 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.
Packages are kept closed to prevent contamination. Roll may telescope, handle with caution.
The film should not be stored near to pungent odouring substances or solvents.
Temperature and humidity should be controlled at 25ºC - 35ºC and less than 85% RH, respectively.
Bare (opened) rolls are recommended to be handled at the condition of 18ºC - 25ºC and less than 65% RH.
It is advisable to use Polyster thermal lamination films within **six months from delivery.** The rolls may be good condition even further if stored properly at recommended conditions in its original packing.

SECTION 8: Exposure Limitation / Personal Protection

Exposure Limits

Polyethylene Terephthalate: No OSHA exposure limits are set up.

Hand Protection

The 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 practices.

SECTION 9: Physical & Chemical Properties

Appearance

Form: FIlm Color: Clear Transparent Odor: Odorless

Data Relevant to Safety

Change in physical state of Metalized PET film	:	Softening point > 250ºC
Change in physical state of LDPE coating film	:	Softening point > 130ºC
Change in physical state of EVA coating film	:	Softening point > 90ºC

Ignition Temperature	:	>400ºC
Lower Explosion Limit	:	not applicable
Higher Explosion Limit	:	not applicable
Vapor pressure at 20ºC	:	not applicable
Density	:	1.00-1.40 g/cm^3
Solubility in Water	:	non soluble
Melting Point	:	95-260ºC
Specific Heat (KJ/kg)	:	1.34 at 25ºC
Thermal Conductivity (W/Mk)	:	0.14
Heat of Combustion (MJ/Kg)	:	23.5
Decomposition Temperature	:	300ºC
pH Value	:	not applicable
Viscosity	:	not applicable
Volatile Content	:	negligible

Material Safety Data Sheet

Polyester Thermal Lamination Film

	SECTION 10: Stability and Reactivity
Stability at Room Temperature	Stable
Thermal Decomposition	> 250°C
Hazardous Decomposition Products	Carbon mono oxide, Carbon di-oxide, Aldehydes, Ketones and Alcohols
Hazardous Reaction	None
	Avoid temperature above 240°C, strong acid and alkali
	SECTION 11: Toxicological Information
Aquatic Toxicity	Very low toxicity for aquatic environment is predicted on the basis of negligble solubility of film in water. Film is not a skin irritant, only irritant to eye. No adverse effects for long or short term contact is known
	SECTION 12: Ecological Information
	Films are not biodegradable Many year experience showes that the product is not hazardous to the environment.
	SECTION 13: Disposal Consideration
Water Disposal	Landfill is preferable. Alternative is forced draft disposal method must confirm to local, state and federal laws.
Spill - Leak or Release	N/A
	SECTION 14: Transport Information
	Not classified hazardous for transport. Dispatch by mail permitted.

Material Safety Data Sheet

Polyester Thermal Lamination Film

	SECTION 15: Regulatory Information
	Clear 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

	SECTION 16: Other Information
Last Revision	Jan 2020
Training Instructions	None Known
Data Sources	Data provided is from Manufacturer's SDS Sheets.

The information furnished herein is believed to be factual. No hazardous substances are used in the manufacturing of this product on this material safety data sheet with the exceptions indicated. Though no specific analysis is done for the products or the raw material used in its manufacturing for hazardous substances stated in various states list. The information is taken from work & qualified experts, however nothing contained in the information is to be taken as warranty or representation for which GVDirect™, bears legal responsibility.

For further information contact -

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