



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Hot Stamping Foil

General Use: Stamped or printed for textile & leather

2. INGREDIENTS

<u>Name</u>	<u>Cas No.</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Polyethylene Terephthalate Film	2308-59-9(PET)	81-86		
Aluminum		trace		
Resin		14-19		
Dye		trace		

3. HAZARDS IDENTIFICATION:

Routes of Entry:

Health Hazards (acute and chronic): None

INHALATION: Combustion of products may be an irritant.

SKIN: No evidence of irritant effects from normal handling and use.

INGESTION: N/A

EYES: Sharp off-cuts may cause eye damage.

Carcinogenicity: N/A

Sign and Symptoms of Exposure: N/A

Medical Conditions: N/A

4. FIRST AID MEASURES In all cases call a physician immediately.

INHALATION: Remove patient from exposure.

INGESTION: Unlikely to be required but, if necessary, treat symptomatically.

EYE CONTACT: Irrigate with eyewash solution or clean water, holding the eyelids apart.

SKIN CONTACT: If symptoms develop, obtain medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: N/A **Flammable Limits:** N/A **Auto-ignition temperature:** N/A

Extinguishing Media: CO₂ and dry chemical powder

Special Fire Fighting Procedures: Combustible but not readily ignited. Thin films (<23 micron) will shrink away from a heat source or flame. Persistent application of a flame will ignite the material. Burning is accompanied by melting and dripping which may cause the fire to spread. Combustion will evolve irritant vapors.

Unusual Fire and Explosion Hazards: At complete combustion, the major products formed are carbon dioxide and water. Some of the products of decomposition will also be present but at a concentration considerably less than carbon dioxide and water. During incomplete combustion a range of products will be formed but mainly carbon dioxide, water and carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES: Scrap film generated through processing, eg. slitting/shredding, should be swept up and disposed of in drums or plastic bags.

7. HANDLING AND STORAGE: It is recommended to store hot stamping foil products in a dry, climate-controlled environment, having the temperature between 10°C- 30°C. Avoid excess dust and humidity. Avoid stacking foil rolls horizontally and on top of one another. Put them on end or float to avoid pressure, which can cause blocking/offsetting. Do not expose the foil to heat, direct sunlight or water.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

Unlikely to cause harmful effects under normal conditions of handling and use. The following values apply to nuisance dust, which may be formed during cold processing (eg. cutting, grinding, stamping). Exposure Limit: Total dust 10mg/m³; Respiratory dust 5mg/m³. Wear suitable gloves to avoid cuts from the sharp edges of films > 125 micron thickness. Wear suitable eye protection when using the material in cold processes (eg. cutting, stamping, grinding).

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A

Melting Point: 491°F/255°C

Freezing Point: N/A

Vapor Pressure: N/A

Vapor Density (Air=1): N/A

Solubility in Water: Insoluble

pH: N/A

Specific Gravity (Water=1): N/A

Viscosity: N/A

Evaporation Rate (Ether =1): N/A

Appearance and odor: Solid and odorless.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to avoid: Keep away from flame and water.

Incompatibility: Strong oxidizing agent.

Hazardous Decomposition/By-Products: Formation of combustible and noxious fumes during thermal decomposition / Carbon Dioxide, Carbon Monoxide, Acetaldehyde, Ethylene.

Hazardous Polymerization: Will not occur.

11. OTHER INFORMATION: Suzhou Wonderful New Material Co., Ltd. provides the information contained herein in good faith. The information is believed to be correct. However it is not allinclusive and should be used only as a guide. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose. Suzhou Wonderful New Material Co., Ltd. shall not be held liable for any damage resulting from handling or from contact with the product listed herein.

12. Abbreviations: PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

N/A: Not Applicable