

The following Corporate Express product numbers are related to the attached msds:



Royal Sovereign Inc. 24B/9L, 451-8 Nomhyun-Dong, Namdong-Ku, Incheon City, Korea

MATERIAL SAFETY DATA SHEET

Material Name: Thermal Laminating Films

Section I. General information/Company Identification

Manufacturer/ Distributor's Name: Royal Sovereign International Incorporated
Address: 100 West Sheffield Avenue, Englewood, New Jersey 07631
Generic Description: Plastic film, Laminating film
Product Names Covered: Royalam I, Royalam II, Foto-Film, Foto-Shield, and LOMEL[™] thermal laminating films .Various numbers may be added with the above indicating different thicknesses and sizes.

Section II. Ingredients and composition

Polyethylene Terephthalate (PET) / Copolymer (EVA) CAS No. 25038-59-9, 24937-78-8 No known hazardous material as defined in 29CFR 1910.1200

Section III. Hazards Identification

These films do not require MSDS sheets. Produces a slight odor when heated or laminating but these vapors show traces of hydrocarbons in undetectable amounts. Normal ventilation should be used. Laminating film made from Polyester, Polyethylene, EVA do not contain any known hazardous chemicals.

Section IV. First Aid and Safety Measures

- **Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eye lids.
- **Skin:** Wash skin with plenty of soap and large amounts of water while removing any contaminated clothing and shoes. Get medical attention if irritation persists.
- Inhalation: Remove from exposure, provide fresh air immediately.

Section V. Fire and Explosion Hazard Data

General information:

Extinguishing media: In Case of fire, use Water, Dry chemical ,Chemical foam, or CO₂. **Flash Point:** N/A **NFPA(National Fire Protection Association) rating:** Health = 0, Flammability = 1 Explosion limits: N/A

Special Procedures: As with any fire, use of self-contained breathing apparatus is recommended, and full protective gear to prevent contact with skin or eyes. During a fire, irritating and highly toxic gases and thick smoke may be generated by thermal decomposition or combustion. If burned by contact with hot plastic sticking to the skin, cool it with cold water quickly and then seek medical attention.

Section VI. Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Sweep or pick- up material to prevent a slipping hazard. Plastic on the floor can become a tripping or slipping hazard, so work place should be kept clear all the times.

Section VII. Handling and Storage

Precaution To Be Taken In Handling And Storage: Keep away from flames and sources of ignition. To prevent accumulations of dust keep airborne dust concentration at a minimum, store in a cool, dry place.

If material must be stored for any length of time, optimum storage parameters are: Maximum $60 \sim 80^{\circ} F(16 \sim 26^{\circ} C)$ ambient temperature with 45% Relative Humidity ideal. **Handling:** Wash hands thoroughly after handling. Avoid contact with eyes, skin and clothing.

Section VIII. Exposure Controls / Personal Protection

Protective Equipment:

Ventilation: Use adequate general or normal exhaust ventilation to keep airborne concentration below the permissible exposure limits.

Skin: Wear appropriate protective gloves and long sleeves for working on hot laminating equipment.

Eyes: Use of Safety glasses or goggles in any industrial operation is suggested.

Section IX. Physical And Chemical Properties

Appearance: Semi-transparent white film Odor: Mild, odorless sheets of film pH: N/A Vapor Pressure: N/A Vapor Density: N/A Boiling Point: N/A Solubility in Water: Insoluble Evaporation Rate: N/A Melting Point: N/A Form: Solid Specific gravity: 0.98~1.3

Section X. Stability And Reactivity

Chemical Stability: Stable under normal temperature and pressure. **Incompatibility(Materials to avoid):** Fluorine-Oxygen mixtures. **Conditions To Avoid:** Temperatures above 158°F (70°C). Film will bond to itself. **Hazardous Decomposition Products:**-Carbon monoxide, carbon dioxide, irritating and toxic fumes.

Hazardous polymerization: None reported.

Section XI. Toxicological Information

Raw materials have any suggestions of carcinogenic, mutagenic or other health hazard or toxicity information..

Polyethylene terephthalate products are non-toxic and cause no chemical damage.

* All this information is based on studies done by manufacturers of individual components

Section XII. Ecological Information

These films are not soluble in water, non-toxic and have minimal impact to the environment.

Section XIII Disposal Considerations

Recycling: In the United States & Canada, this film product have to be disposed of in accordance with applicable federal, state, and local solid waste labeling, shipping and disposal laws and regulations.

Incineration: Thermal laminating films have a high fuel value, and burn clean, making incineration with energy recovery a preferred mode of disposal.

Section IV. Transportation Information

Non-regulated commodity

Section XV. Regulatory Information

| Regulation | <u>PET</u> | EVA |
|--------------------------------------|---------------|---------------|
| Occupational safety Health | Non Regulated | Non Regulated |
| Hazardous chemical material managing | Non Regulated | Non Regulated |
| Dangerous article safety managing | Non Regulated | Non Regulated |

United States

40 CFR 355.30, 40 CFR 370.21, 40 CFR 372.65, 29 CFR 1910.119 : Non regulated commodity This MSDS information may be copied and distributed for these materials.

Section XVI. Other Information

This information is offered in good faith, and not as a product specification. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in specific context of the intended use and determine whether they are appropriate. In the event that you disagree with these recommendations, or learn of data that would contradict any of the information, please contact Royal Sovereign International so that we may investigate and possibly update our MSDS. Thank you for helping us provide the best information possible.

Date Entered: September 1, 2004 **Date Revised:** September 15. 2004 **Revised By:** Matthias Kim. Ph.D.