

# MYLAR / POLYESTER FILM

Safety Data Sheet

(non-coated, non PvDC)

## 1. Product and Company Identification

Polyester film is a Single or Multilayer Oriented Polyester Film.

**Company Info:** The Hitt Companies, Inc.  
3231 W. MacArthur Blvd.  
Santa Ana, CA 90704  
Tel: 714-979-1405  
Emergency Number: 5800-969-6699

## 2. Chemical Make-up

Polyester Film aka: Polyethylene Terephthalate. The base resin is produced from ethylene glycol (CAS 107-21-1) and dimethyl terephthalate (CAS 120-61-6), or terephthalic acid (CAS 100-21-0).

If Present, here are some more CAS Numbers:

- Modified PET Copolymer 24938-04-3 < 20%

Coextrusion Layer:

- Titanium Dioxide 13463-67-7 < 20%
- Silicon Dioxide 7631-86-9 < 5%
- Fillers, Colorants, Additives various < 5%
- Surface Coatings various < 1%
- Slip Agents Max 0.4 % (SiO<sub>2</sub>)
- If Metalized, thin layers of AL, up to 600 Angstroms (Metal Side only)

## 3. General Properties

The above film is considered inert while using continuously at the temperature of 302° F.

It is also chemically inert to most organic solvents at room temperature. However, avoid contact with strong acids and bases. Hydrolysis by moisture at elevated temperature is possible. Industrial films are not recommended for applications requiring prolonged exposure to direct sunlight. The degradation by the UV rays is possible.

## 4. Toxicological Information

No special toxicity has been reported for more than 50 years since it was first commercially used. The FDA has also considered Polyethylene Terephthalate film as a harmless packaging material for all types of food. Instead, the following care should be taken into consideration for safe handling.

### 1. Inhalation:

- Combustion products may be irritant.
- High concentrations of dust may be an irritant to the respiratory tract.

### 2. Skin Contact:

- Sharp edges may cause cuts.
- Molten polymer adhering to the skin causes deep thermal burns.
- No evidence of irritant effects from normal handling and use.

### 3. Eye Contact:

- Sharp off cuts may cause eye damage.

### 4. Ingestion:

- Unlikely under normal industrial use.

### 5. Long Term Exposure:

- This material has been in use for many years with no evidence of adverse effects.

#### 4. Combustion and Pyrolysis:

The above-named film only emits carbon dioxide and water through complete combustion. Incomplete combustion, however, may give rise to carbon monoxide, acetaldehyde, methane, ethanol, dioxolane, and other products. The compounds such as benzoic acid, terephthalic acid, acetophenone, acid anhydrides, carbon monoxide, carbon dioxide, methane, ethylene, and acetylene can be generated by the vapor phase pyrolysis of PET at 752 ~ 932°F.

#### 5. Flammability:

This film is not flammable at normal processing and storage conditions. Its ignition temperature in air ranges from 797 ~ 932°F.

#### 6. Disposal in Soil:

This film is also stable to fungi and bacteria that it will not undergo the decomposition even 36 months after burial in bacteria-infested soil.

#### 7. Static Discharges:

Since this film maintains good dielectric properties, the high-speed process of this film web can build up a strong static charge, which can be discharged to workers and metal equipment's. It can also generate a flash fire or an explosion in solvent rich air. Thus, extreme precaution is needed to avoid static accumulation when using Industrial film with flammable solvents. The fire protection equipment's such as fire extinguisher or detector should be placed.

#### 8. Scrap Disposal:

No special problem has been reported for the disposal of this film as scrap

#### 9. Physical and Thermal Properties:

Form

Color Clear	White
Odor Odorless	
Flash Point	824 F. A 1-inch-wide strip of 200gauge film burns at 254 to 305mm/minute (ASTM D-568).
Density (g/cm <sup>3</sup> )	1.390 - 1.400 at 74°F
Solubility (Water)	Insoluble
Minimum Ignition Temperature	896°F
Decomposition Temperature	> 500°F
Melting Temperature	491 - 500°F