

The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont Teijin Films
Material Safety Data Sheet

Page 1

POLY0008 "MELINEX" POLYESTER FILM
Revised 15-FEB-2007

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

Melinex is a registered trademark of DuPont Teijin Films.

Product Use

OSHA Hazard Communication Standard (29 CFR 1910.1200) requirements for Material Safety Data Sheets do not apply to the product described in this information sheet. This product is excluded as an article.

Uses include Packaging, Industrial, Storage & Display.

Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont Teijin Films
U.S. Limited Partnership
1 Discovery Drive
P.O. Box 411
Hopewell, VA 23860 USA

PHONE NUMBERS

Product Information : (800) 635-4639 Fax: (804) 530-9867
Transport Emergency : CHEMTREC: 1-800-424-9300

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
"Melinex" Polyester Film is made from:		
Polyethylene Terephthalate	25038-59-9	80-100

Coextrusion layers may be present. Various fillers or additives used to modify the physical appearance and/or surface properties of the various film types may be present. Concentrations of the following may range from 1-20%:

Isophthalate Copolymer (coextrusion layer)	24938-04-3	
Barium Sulfate	7727-43-7	
Polypropylene	9003-07-0	
Silica Gel	63231-67-4	
Carbon Black	1333-86-4	
Titanium Dioxide	13463-67-7	

(COMPOSITION/INFORMATION ON INGREDIENTS - Continued)

Components (Remarks)

The information presented in the subsequent sections of this information sheet is representative of all "Melinex" polyester film products, including those with/without fillers and those with/without coextrusion layers.

HAZARDS IDENTIFICATION

Emergency Overview

No known health hazards.

Appearance: Solid film
Odor: Odorless

Read the entire MSDS for a more thorough evaluation of the hazards.

Potential Health Effects

Decomposition products caused by overheating polyethylene terephthalate may cause skin, eye or respiratory irritation.

Molten polymer can cause thermal burns.

All ingredients are fully incorporated into the product.
Exposure to fillers encapsulated in the film polymer is not likely during normal use.

Carcinogenicity Information

The following components are listed by IARC, NTP, OSHA or ACGIH as carcinogens.

Material	IARC	NTP	OSHA	ACGIH
Carbon Black	2B			
Titanium Dioxide	2B			

FIRST AID MEASURES

First Aid

INHALATION

No specific intervention is indicated as the compound is not likely to be hazardous by inhalation.

However, if exposed to fumes from overheating or combustion, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician if necessary.

(FIRST AID MEASURES - Continued)

SKIN CONTACT

The compound is not likely to be hazardous by skin contact but cleansing the skin after use is advisable.

If molten material gets on skin, cool rapidly with cold water. Do not attempt to remove material from skin. Obtain medical treatment for thermal burn.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

Ingestion is not an expected route of exposure during normal use of the product. If ingested, consult a physician immediately.

Notes to Physicians

Prolonged eye irritation may occur from pieces of debris sticking to the eyeball or eyelids.

FIRE FIGHTING MEASURES

Flammable Properties

Films can be combusted only by remaining in contact with flame. If flame source is stationary, the film will shrink away and self-extinguish. Film remaining in contact with flame can continue to burn slowly, dropping flaming liquid which can spread the fire.

Irritating fumes may be evolved at decomposition temperatures.

During processing, films may pick up a strong static charge. Avoid discharge onto dust or solvent laden air as a flash fire or explosion may result.

Extinguishing Media

Use media appropriate for surrounding material.

Fire Fighting Instructions

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Spill Clean Up

Films and film scraps can create a slipping hazard. Collect product for recovery or disposal.

HANDLING AND STORAGE

Handling (Personnel)

Do not breathe vapors or fumes that may be evolved during processing.

Avoid skin contact with sharp film edges.

Handling (Physical Aspects)

Rolls of film may telescope. Use caution when handling.

Rolled film should be stored at intended processing temperature for approximately 24 hours prior to use.

Plastic packaging materials can pick up static charge. Polyester film rolls packaged with shrinkwrap (or other plastic overwrap) should be opened or unwrapped only in non-process areas where ignition sources such as solvents are not in use or in storage.

Storage

Store away from heat and sources of ignition. Do not store in direct sunlight. Avoid prolonged storage in high or low temperatures. Recommended storage temperatures are 20 F (-7 C) to 100F (38 C).

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

General exhaust is acceptable except where overheating can occur during processing. Remove fumes released by decomposition with local exhaust if overheating occurs.

Movement of film over metal or rollers will produce a surface static charge on the film. Consider processing design and procedures that will reduce or dissipate this

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

charge, and eliminate the possibility of unwanted electrical discharge to people, equipment and materials.

Personal Protective Equipment

EYE/FACE PROTECTION

Wear safety glasses.

RESPIRATORY PROTECTION

Respirators are not needed for normal use.

Where airborne concentrations are expected to exceed exposure limits, a NIOSH approved respirator should be selected based on the form and concentration of the contaminant in air and in accordance with OSHA Respiratory Protection Standard CFR 1910.134.

PROTECTIVE CLOTHING

If there is potential for contact with hot/molten material, wear heat resistant impervious clothing and footwear.

Special protective clothing is not needed for normal use. Gloves are recommended as good industrial practice.

Exposure Guidelines

Applicable Exposure Limits

Polyethylene Terephthalate

PEL (OSHA)	: None Established
TLV (ACGIH)	: None Established
AEL * (DuPont)	: 10 mg/m ³ , 8 Hr. TWA, total dust 5 mg/m ³ , 8 Hr. TWA, respirable dust

Barium Sulfate

PEL (OSHA)	: 15 mg/m ³ , total dust, 8 Hr. TWA 5 mg/m ³ , respirable dust, 8 Hr. TWA
TLV (ACGIH)	: 10 mg/m ³ , total dust, 8 Hr. TWA
AEL * (DuPont)	: 10 mg/m ³ , 8 & 12 Hr. TWA, total dust 5 mg/m ³ , 8 & 12 Hr. TWA, respirable dust

Polypropylene

PEL (OSHA)	: None Established
TLV (ACGIH)	: None Established
AEL * (DuPont)	: 10 mg/m ³ , 8 & 12 Hr. TWA, total dust 5 mg/m ³ , 8 & 12 Hr. TWA, respirable dust

Silica Gel

(Applicable Exposure Limits - Continued)

PEL (OSHA) : 80 mg/m3 / % SiO2 - 8 Hr TWA
TLV (ACGIH) : 10 mg/m3, 8 Hr. TWA, total dust
Or see: Diatomaceous Earth (uncalcined)
[61790-53-2]
AEL * (DuPont) : 2 mg/m3, 8 & 12 Hr. TWA, respirable dust

Carbon Black

PEL (OSHA) : 3.5 mg/m3, 8 Hr. TWA
TLV (ACGIH) : 3.5 mg/m3, 8 Hr. TWA, A4
AEL * (DuPont) : 0.5 mg/m3, 8 & 12 Hr. TWA, (Polynuclear
Aromatic Hydrocarbon Content <0.1%)
Includes Channel, Lamp, and Thermal
Black

Titanium Dioxide

PEL (OSHA) : 15 mg/m3, total dust, 8 Hr. TWA
TLV (ACGIH) : 10 mg/m3, total dust, 8 Hr. TWA, A4
AEL * (DuPont) : 10 mg/m3, 8 & 12 Hr. TWA, total dust
5 mg/m3, 8 & 12 Hr. TWA, respirable dust

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Form : Film.
Color : Colorless to black (dependent on film type).
Melting Point : ~500 F (~260 C)
Solubility in Water : Insoluble
Specific Gravity : 1.2-1.38
Vapor Pressure : Negligible @ 20 C (68 F)

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

None reasonably foreseeable.

Decomposition

Decomposition temperature: >300 C (>572 F)

Decomposition products include carbon oxides, aldehydes, terephthalic acid.

(STABILITY AND REACTIVITY - Continued)

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Polyethylene Terephthalate
Oral ALD: > 10,000 mg/kg in rats

Polyethylene Terephthalate is not a skin irritant, but is a mild eye irritant.

ECOLOGICAL INFORMATION

Ecotoxicological Information

No information is available. Toxicity is expected to be low since films are insoluble in water. Films are not biodegradable.

DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

TRANSPORTATION INFORMATION

Shipping Information

DOT
Not Regulated.

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status: In compliance with TSCA Inventory requirements for commercial purposes.

(REGULATORY INFORMATION - Continued)

SARA Regulations Sections 313 and 40 CFR 372: This product does not contain any chemicals subject to the reporting requirements of SARA.

Clean Air Act Status: This product does not contain, and is not manufactured with ozone depleting chemicals as defined in 58 FR 8136, February 11, 1993 (final rule)

State Regulations (U.S.)

CONEG Status: All "Melinex" products are compliant with CONEG regulations; the sum of the concentrations of cadmium, chromium, lead and mercury does not exceed 100 ppm. None of these metals is used as an ingredient or processing aid.

California Proposition 65 Status: This product does not contain substances that require a warning pursuant to Propositions 65.

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	: 1
Flammability	: 1
Reactivity	: 0

NPCA-HMIS Rating	
Health	: 0
Flammability	: 1
Reactivity	: 0

Additional Information

MEDICAL USE: CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications see DuPont Teijin Films CAUTION Bulletin No. H-50102-1-DTF.

"Melinex" Polyester Film products are not manufactured with any ingredient of bovine origin.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Polyester Films MSDS Coordinator
1007 Market St. Room D-6054A
Wilmington, DE 19898
302-773-0904

(Continued)

Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS