



## Skyrol<sup>®</sup> Polyester Film Safety Data Sheet

This SDS was formatted to meet U.S. (North American) standards and regulatory requirements, and also the Globally Harmonized System requirement.

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

Revision Date: March 2015

**Manufacturer: SKC Inc.**

### SECTION I – IDENTIFICATION

#### Material Identification

SKYROL<sup>®</sup> Polyester (Polyethylene Terephthalate) Film is a registered trademark of SKC Inc. Polyester film is sometimes referred to as ‘PET’ film.

#### Product Description

Single or Multilayer Oriented Polyester Film (does not include high shrink films or PVdC coated film).

#### Product Use

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

Uses include packaging, industrial, storage and display, among others.

#### Company Identification

##### Manufacturer / Distributor

SKC Inc. (Films Division)  
1000 SKC Drive  
Covington, Georgia, 30014, USA

##### Phone Numbers

Product Information: 678-342-1000 Fax: 678-342-1200  
Transport Emergency: 1-800-424-9300 (Chemtrec)

## SECTION II –HAZARD IDENTIFICATION

SKYROL<sup>®</sup> Polyester (Polyethylene Terephthalate) Film is not a hazardous material and is not considered dangerous according to criteria set by OSHA's GHS standard.

## SECTION III – COMPOSITION / INFORMATION ON INGREDIENTS

### Basic Chemical Composition

Material	CAS Number	Percentage
SKYROL <sup>®</sup> Polyester Film is: Polyethylene Terephthalate	25038-59-9	80 - 100%

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).

Co-extrusion layers may be present. Various fillers or additives, used to modify the physical appearance and/or surface properties of the various film types, may also be present (based on specific film type).

If Present:

Modified PET Copolymer (Coextrusion Layer)	24938-04-3	< 20%
Titanium Dioxide	13463-67-7	< 20%
Silicon Dioxide	7631-86-9	< 5%
Fillers, Colorants, Additives	various	< 5%
Surface Coatings	various	< 1%

## **SECTION IV – FIRST AID MEASURES**

**INHALATION:** If exposed to fumes from overheating or combustion, move to fresh air. Consult physician if symptoms persist.

**SKIN CONTACT:** Very unlikely for PET to have hazardous effect on skin, but it is recommended to wash hands and skin after handling. If molten PET polymer gets on skin, cool rapidly with cold water. Obtain medical attention immediately for any resulting thermal burns.

**EYE CONTACT:** Immediately flush with plenty of water for at least 15 minutes. Obtain medical attention if necessary.

**INGESTION:** Consult physician if ingested.

**NOTES TO PHYSICIANS:** Prolonged eye irritation may occur from pieces of debris sticking to the eyeball or eyelids.

## **SECTION V – FIRE FIGHTING MEASURES**

**Skyrol<sup>®</sup>** Polyester film is combustible, if exposed to flame..

During processing, film may build up static charge.  
Static Eliminators are strongly recommended.

### **FIRE AND EXPLOSIVE HAZARDS**

During combustion, hazardous byproducts are produced; these include carbondioxide, carbonmonoxide, organic acids, aldehydes and alcohols.

**EXTINGUISHING MEDIA:** Water, Foam, Dry Chemical and Carbondioxide.

**FIRE EXTINGUISHING INSTRUCTIONS:** Keep personnel removed and upwind of fire.  
Wear self-contained breathing apparatus with full protective equipment.

## **SECTION VI – ACCIDENTAL RELEASE MEASURES**

Safeguards (Personnel)

Please Review FIRE FIGHTING MEASURES and HEALTH HAZARDS INFORMATION before proceeding with Clean up.  
Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.

## SECTION VII – HANDLING AND STORAGE

- Avoid breathing vapors during processing.
- Thicker films may have sharp edges. Use appropriate Personal Protective Equipment when handling.
- Shall be stored away from heat and sources of ignition.
- Avoid storage in direct sunlight and prolonged storage in high or low temperatures.

## SECTION VIII – EXPOSURE CONTROLS/ PERSONAL PROTECTION

Be aware that film may generate a strong static charge during winding and unwinding. Static eliminators should be used to eliminate the possibility of unwanted electrical discharge to people, equipment and materials.

### Personal Protective Equipment:

- Wear safety glasses to protect eyes.
- Wear protective glove to avoid cuts from sharp edges of film.

## SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

### Physical Data

<b>Form:</b>	Flat film, supplied in either sheet or roll form
<b>Appearance:</b>	Transparent, with various levels of haze; Colors may include white, gray or blue
<b>Odor:</b>	Odorless
<b>Melting Point:</b>	256 ~ 265 °C (or lower for modified resins)
<b>Specific Gravity:</b>	1.4 g/cc (as low as 1.2 g/cc for modified films, and as high as 1.5 g/cc for white films)
<b>Flash/Ignition Temp:</b>	497 °C
<b>Heat of Combustion:</b>	23.5 ml/kg
<b>Specific Heat:</b>	1.34 KJ/kg @ 25°C (for plain films)
<b>Thermal Conductivity:</b>	$3.4 \times 10^4$ cal/cm <sup>3</sup> .sec. °C
<b>Solubility:</b>	Insoluble in water
<b>Volatility:</b>	Negligible up to 300°C
<b>Vapor Pressure</b>	Negligible @ 20°C (68°F)

For specific film properties data, contact an SKC product engineer

**Trade names and synonym prefixes denoting type of Skyrol® films, such as SG, SH, SL, SM, SP, SR, SW, etc., and suffixes for thickness such as 12u or 100gauge etc., do not alter the chemical properties or the information provided herewith.**

## **SECTION X – STABILITY AND REACTIVITY**

### **Chemical Stability**

Stable at room temperature and in typical storage conditions.

### **Incompatibility with Other Materials**

Avoid contact with strong acids and/or bases, and oxidizing agents.

### **Decomposition**

Decomposition Temperature > 300°C (572°F)

Decomposition products may include acetaldehyde (CAS 75-07-0), at a low level.

### **Polymerization**

Polymerization will not occur.

## **SECTION XI – TOXICOLOGICAL INFORMATION**

### **Health Hazards**

Polyester film is inert in its physical state, and is non-reactive.

Skin Effect – Not considered as a skin irritant. Some films may exhibit sharp edges and/or corners (wear proper personal protective equipment, such as gloves).

Molten polymer can cause thermal burns. Wear proper personal protective equipment.

Inhalation – No adverse effects, with normal use.

Ingestion – Not expected during normal use. If ingested, seek medical attention.

### **Carcinogenic Information**

IARC, NTP, OSHA or ACGIH list the following component(s) as carcinogens:

Material	IARC	NTP	OSHA	ACGIH
Titanium Dioxide				2B

### **Toxicology Information**

#### **Animal Data**

Polyethylene Terephthalate

Oral ALD > 10,000 mg/kg in rats

## **SECTION XII – ECOLOGICAL INFORMATION**

**Skyrol**<sup>®</sup> Polyester film is not regarded as dangerous to the environment and is expected to have no adverse effects as it is solid, low volatility and insoluble in water.

## **SECTION XIII – DISPOSAL CONSIDERATIONS**

Preferred options for disposal include RECYCLING, INCINERATION with ENERGY RECOVERY and LANDFILL.

Treatment, Storage, Transportation, and Disposal must be done in accordance with applicable Federal, State and Local Regulations.

## **SECTION XIII – TRANSPORT INFORMATION**

There are no restrictions or special conditions for shipment.  
Not regulated by DOT

## **SECTION XV – REGULATORY INFORMATION**

U.S. Federal Regulations:

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

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)

TITLE III HAZARD CLASSIFICATION: Information not available.

California Proposition 65: This product is compliant, in that there are no contained substances that require a warning (per CalProp 65 specifications).

## **SECTION XVI – OTHER INFORMATION**

### **NFPA, NPCA-HMIS**

#### **NFPA Rating**

Health: 1  
Flammability: 1  
Reactivity: 0

#### **NPCA-HMIS Rating**

Health: 0  
Flammability: 1  
Reactivity: 0

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