

Material Safety Data Sheet

COMPOSITION/INFORMATION OF INGREDIENTS

Components

Material	CAS Number	%
Titanium Dioxide	13463-67-7	<5
Fiber Lubricants		0.02-3
Caron Black	1333-86-4	0-3
Color Pigment	Depends on Component	0-9
PET Flame Retardant Non-Halogenated	Proprietary	0-1
UV Stabilizer	Proprietary	0-5
Polymer-Polyester*		87-99.9
Polyethylene Terephthalate*	25038-59-9	
Poly (Dimethyl Terephthalate/Ethylene glycol/Sodium 1,3-Dimethyl 5-sulfoisophthalate)*	27937-63-9	
*Polyester polymers		

Polyester fiber contains less than 3% total finish by weight of fiber. Some components or degradation products may be released under processing conditions. Where there are hazards associated with these substances, they are recorded in the appropriate section of the MSDS.

HAZARD IDENTIFICATION

Potential Health Effects

Polyester yarns present low hazard for usual industrial or commercial handling. If a processing step results in significant airborne fibers, recommends an airborne exposure limit of 10 mg fiber as particulate/M3 as an 8 hour time weighted average (TWA).

This product may contain up to five percent titanium dioxide (TiO₂) as light scattering agent to impart with color. When incorporated into the fiber, we do not believe TiO₂ presents a significant hazard.

The product is coated with lubricants which have been toxicologically evaluated and found to be generally of a low order of acute oral and inhalation toxicity in animals and of dermal toxicity in humans. They do not present a significant health hazard in the normal use. If in processing there is a potential to generate airborne concentrations of these oils as a mist, we recommend an airborne exposure limit of 5 mg as particulate/m³ as an 8 hour TWA.

If heated to temperature of 150-250 degrees C during processing, these lubricating oil can degrade and generate off gases which may contain very small amounts of such chemicals as aldehydes, alcohols, acetic acid, acetone, etc. Local exhaust ventilation is recommended.

Carcinogenicity Information

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

Material
Carbon Black

IARC NTP OSHA ACGIH
2B

FIRST AID MEASURES

First Aid

INHALATION

No specific intervention is indicated. Consult a physician if necessary.

SKIN CONTACT

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

EYE CONTACT

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

INGESTION

No specific intervention is indicated as fiber is not likely to be hazardous by ingestion. Consult a physician if necessary.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point Not applicable. Material will burn in a fire.

FIRE AND EXPLOSION HAZARDS

None.

Hazardous gases/vapors produced in fire are: aldehydes, ethanol, methanol, acetic acid, acetone, etc. Combustion products are similar to those of other organic materials composed of the same elements.

Extinguishing Media

Water, Foam, Dry Chemical, CO2 are all effective.

Fire Fighting Instructions

Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

ACCIDENTIAL RELEASE MEASURES

Safeguard (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

Polyester fibers present no unusual spill or release potential. Shovel or sweep up for disposal.

HANDLING AND STORAGE

Handling (Personnel)

Avoid breathing hot vapors, oil mists, and airborne fibers. Wash thoroughly after handling.

Storage

Store cartons and bales in accord with good material handling practices.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment

Generally Applicable Control Measures and Precautions

While no special controls or handling procedures are required, it is recommended that exposure to any inhalable material be minimize by the use of adequate ventilation, such as local exhaust, effective containment, and personal cleanliness.

EYE/FACE

Safety Glasses

Exposure Guidelines

Applicable Exposure Limits

Titanium Dioxide

PEL (OSHA)	15 mg/m ³ , total dust, 8 Hr. TWA
TLV (ACGIH)	10 mg/m ³ , total dust, 8 Hr. TWA, A4
AEL *	10 mg/m ³ , total dust, 8 Hr. TWA
	5 mg/m ³ , RESPIRABLE dust, 8 Hr. TWA

Carbon Black

(Applicable Exposure Limits – Continued)

PEL (OSHA)	3.5 mg/m ³ , 8 Hr. TWA
TLV (ACGIH)	3.5 mg/m ³ , 9 Hr.
AEL *	0.5 mg/m ³ , 8 & 12 Hr. TWA, (Polynuclear Aromatic Hydrocarbon Content <0.1%). Includes Channel, Lamp, and Thermal Black

Polyethylene Terephthalate

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

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

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data	
Melting Point	250 to 300 degrees C
Water Solubility	Insoluble
Form	Fiber
Color	Clear and colorless, white if product contains TiO ₂ , black if product contains carbon black.
Odor	Odorless
% Volatiles	3% only the finish will volatilized below the melting point.

STABILITY AND REACTIVITY

Chemical Stability	Stable
Incompatibility with other materials	Non reasonable foreseeable
Decomposition	Decomposes with heat

If heated to 150 – 200 degrees C during processing, the fiber lubricants can degrade and generate off gases which may contain small amounts of such chemicals as aldehydes, alcohols, acetic acid, acetone, etc. We are not aware of chemicals such as these reaching concentrations that present a serious health hazards. However, information on toxic effects and recommended exposure limits of these and other chemicals can be found in the most recent edition of the ACGIH documentation of threshold limits values.

When polyester fiber is burned, no unusual combustion gases have been observed and its combustion products are similar to those of other organic materials composed of the same elements.

DISPOSAL CONSIDERATIONS

Waste Disposal

Polyester fiber is essentially non-biodegradable, but most of the fiber finishes are biodegradable. It contains no significant percentage of materials extractable by contact with ambient waters. It is stable in all recommended use environments and requires no special spill handling procedures.

Polyester fiber may be disposed of by incineration, preferably by recovering the energy for other uses. The fiber produces off gases during incineration which are similar to those produced by incineration of other natural and man-made fiber, with negligible NO_x attributed to polyester. Those polyester fibers made from polymers containing low levels of sulfur may produce SO_x when incinerated. A nonhazardous ash which passes the Toxic Chemical Leachate Procedure should be produced.

Polyester fiber is not hazardous waste as defined by regulation implementing the Resource Conservation and Recovery Act (RCRA).

Polyester fiber and fabrics are not regulated as hazardous waste under the Comprehensive Environment Response, Compensation and Liability Act (CERCLA) and are not subject to the Superfund tax.

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

REGULATORY INFORMATION

U.S. Federal Regulation

Toxic Substances Control Act (TSCA)

Polyester fiber is considered an "article" under provisions of TSCA. All non-exempt chemical substances incorporated into the product or applied to the surface included in the TSCA Inventory of Chemical Substances compiled by U.S. Environmental Protection Agency (EPA).

Occupational Safety and Health Act (OSHA)

This product is not a "hazardous chemical" as regulated under the OSHA Hazard Communication Standard (29 CFR 19010.1200). This data sheet is provided merely as an informational resource for our customers

Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA)

Polyester fiber contains no chemicals in concentration reportable under Section 313 of EPCRA.

State Regulations (U.S.)

California Safe Drinking Water Toxic Enforcement Act of 1986 (Proposition 65):

Polyester fiber contains none of the substances known to the State of California to cause cancer or reproductive toxicity.

Pennsylvania and New Jersey Right-To-Know Law:

Polyester fiber may contain carbon black and titanium dioxide, which is listed on both the New Jersey and Pennsylvania Right-To-Know regulatory lists.

OTHER INFORMATION

Additional Information

MEDICAL USE: CAUTION: Do not use materials in medical applications involving permanent implantation in the human body or permanent contact with internal body fluids or tissues.

Do not use materials in medical applications involving brief or temporary implantation in the human body or contact with internal body fluid or tissues unless the material has been provided directly from under a contract which expressly acknowledges the contemplated use.

Clean Air Act Amendments of 1990

Polyester fiber contains none of the ozone depleting substances listed in either Class I (chlorofluorocarbons, halon, carbon tetrachloride and methyl chloroform) or Class II (hydrochlorofluorocarbons) of the Clean Air Act Amendments of 1990.

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.

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