

# SAFETY DATA SHEET

## Polyester Fiber or Staple (All Grades)

### 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

#### PRODUCT IDENTIFIER:

Polyester Fiber or Staple (All Grades):

Dacron® Polyester Fiber/Staple  
 Delcron® Polyester Fiber/Staple  
 AirLoft® Polyester Fiber/Staple  
 Delcron® Hydrotec Polyester Fiber/Staple  
 SteriPur® AM Polyester Fiber/Staple  
 SteriPur® FC Polyester Fiber/Staple  
 HydroPur® Polyester Fiber/Staple

#### RECOMMENDED USE AND USE RESTRICTIONS:

Fiber/staple for non-wovens, wovens, and knits industry. See attached "Medical Caution Bulletin No. 1", at end of SDS for use restrictions.

#### MANUFACTURER / SUPPLIER:

Alpek Polyester USA, LLC.  
 7621 Little Ave., Suite 500  
 Charlotte, NC 28226  
 www.AlpekPolyester.com

#### EMERGENCY PHONE NUMBERS:

Product Information: 1-800-237-8275  
 Transport Emergency: CHEMTREC 1-800-424-9300

### 2. HAZARDS IDENTIFICATION

#### OSHA HAZARD CLASSIFICATION:

Non-hazardous. Staple fiber presents low hazards for usual industrial or commercial handling.

#### HAZARDS NOT OTHERWISE CLASSIFIED:

Eye contact with airborne polyester fibers/staple may cause mechanical irritation with discomfort, tearing, or blurring of vision.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### COMPONENTS:

Material	%	CAS Number
Silver*	<1	
Carbon Black**	<5	1333-86-4
Titanium Dioxide	<0.4	13463-67-7
Fiber Lubricant	0.02-3	
Polymer-Polyester*** consisting of:	89-99.9	
- Polyethylene Terephthalate		25038-59-9
- Poly(Dimethyl Terephthalate/Ethylene Glycol/Sodium 1, 3-Dimethyl 5-Sulfoisophthalate		27937-63-9
- Polyethylene Terephthalate/Sodium Sulfodimethylisophthalate/ Polyethylene Oxide terpolymer		9069-94-7
- Poly(Diethylene Glycol/Dimethyl Terephthalate/Ethylene Glycol)		29154-49-2
- Poly(Dimethyl Terephthalate/Ethylene Glycol/Polyethylene Glycol)		9037-98-3

\* Used in SteriPur® and HydroPur® brands only.

\*\* Used in MB2F394 and MB3F394 products only.

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\*\*\* Polyester polymers 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 SDS.

#### **4. FIRST AID MEASURES**

**DESCRIPTION OF NECESSARY MEASURES:**

INHALATION: No specific intervention is indicated. Call 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. Consult a physician.

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

**MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:**

None expected during normal industrial or commercial handling.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT:**

None expected during normal industrial or commercial handling.

#### **5. FIRE FIGHTING MEASURES**

**SUITABLE EXTINGUISHING MEDIA:**

Water, Foam, Carbon Dioxide (CO<sub>2</sub>), or Dry Chemical.

**SPECIFIC HAZARDS ARISING FROM CHEMICAL:**

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide and carbon monoxide. When Polyester Staple 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.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:**

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

#### **6. ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS / PROTECTIVE EQUIPMENT / EMERGENCY PROCEDURES**

Review Section 5. FIRE FIGHTING MEASURES and Section 7. PRECAUTIONS FOR SAFE HANDLING before proceeding with clean-up.

Use appropriate Personal Protective Equipment during clean-up.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:**

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

#### **7. HANDLING AND STORAGE**

**PRECAUTIONS FOR SAFE HANDLING:**

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

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**

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

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**EXPOSURE LIMITS:**

	Carbon Black	Titanium Dioxide	Particles Not Otherwise Specified	Particulates Not Otherwise Regulated (PNOR)	Oil Mist <sup>+</sup> , mineral
PEL (OSHA):	3.5 mg/m <sup>3</sup>	15 mg/m <sup>3</sup> Total dust	–	15 mg/m <sup>3</sup> Total dust 5 mg/m <sup>3</sup> Respirable fraction	5 mg/m <sup>3</sup>
TLV (ACGIH):	3 mg/m <sup>3</sup> as Inhalable fraction	10 mg/m <sup>3</sup>	3 mg/m <sup>3</sup> Respirable particles 10 mg/m <sup>3</sup> Inhalable particles	–	–

\*All exposure limits presented are 8-hour time weighted average (TWA) limits.

<sup>+</sup>Product is coated with lubricants that depending on processing could become airborne.

**APPROPRIATE ENGINEERING CONTROLS:**

It is recommended that exposure to any inhalable material or hazardous decomposition products be minimized by the use of adequate ventilation, such as local exhaust.

**INDIVIDUAL PROTECTION MEASURES / PERSONAL PROTECTIVE EQUIPMENT:**

EYE/FACE PROTECTION: 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 the OSHA Respiratory Protection Standard (29 CFR 1910.134).

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

RECOMMENDED DECONTAMINATION FACILITIES: Eyewash station, washing facilities.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Fiber, clear and colorless, white if product contains TiO <sub>2</sub> , black if product contains carbon black	<b>Vapor Pressure:</b>	Not Applicable
<b>Odor:</b>	Odorless	<b>Vapor Density:</b>	Not Applicable
<b>Odor Threshold:</b>	No data available	<b>Specific Gravity:</b>	>1
<b>pH:</b>	Not Applicable	<b>Solubility in Water:</b>	Insoluble
<b>Melting Point:</b>	250 – 300 °C	<b>Partition coefficient (n-octanol/water):</b>	No data available
<b>Initial Boiling Point and Boiling Range:</b>	No data available	<b>Auto-Ignition Temperature:</b>	No data available
<b>Flash Point:</b>	Not applicable, combustible solid	<b>Decomposition Temperature:</b>	150 – 250 °C
<b>Evaporation Rate:</b>	No data available	<b>Viscosity:</b>	No data available
<b>Flammability:</b>	No data available	<b>% Volatiles:</b>	3% – Only finish will volatilize below the melting point
<b>Flammability Limits (Upper/Lower):</b>	No data available		

## 10. STABILITY AND REACTIVITY

**REACTIVITY:**

None known.

**CHEMICAL STABILITY:**

Stable at normal conditions. Polymerization will not occur.

**POSSIBILITY OF HAZARDOUS REACTIONS:**

None known.

**CONDITIONS TO AVOID:**

Temperatures above 150 – 250 °C.

**INCOMPATIBLE MATERIALS:**

None reasonably foreseeable.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

If heated to 150 – 250 °C during processing, fiber lubricants can degrade and generate off gases which may contain small amounts of chemicals such as aldehydes, alcohols, acetic acid, acetone, etc. DAK Americas is not aware of chemicals such as these reaching concentrations that present 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 limit values.

## 11. TOXICOLOGICAL INFORMATION

**INFORMATION ON LIKELY ROUTES OF EXPOSURE:**

Fibers may be inhaled, and come in contact with skin and eyes. If heated to 150 – 250 °C, thermal decomposition products may be inhaled.

**SYMPTOMS RELATED TO PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:**

- Eye contact with loose fibers may cause mechanical irritation with discomfort, tearing, or blurring of vision.
- Decomposition products (gases, vapors and/or fumes) may cause skin, eye or respiratory tract irritation, and other adverse health effects.

**ACUTE, DELAYED, AND CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:**

Polyester fiber/staple products are 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 their normal use.

**NUMERICAL MEASURES OF TOXICITY**

No information available.

**CARCINOGENICITY INFORMATION:**

Carbon black and titanium dioxide are listed by IARC as Class 2B Carcinogens. **NOTE:** Polyester fiber and staple products have not been classified as carcinogens since carbon black and titanium dioxide are expected to remain bound within the product matrix during normal use.

## 12. ECOLOGICAL INFORMATION

No toxicity data is available. The product is insoluble in water.

### 13. DISPOSAL CONSIDERATIONS

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 procedure.

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 the incineration of other natural and man-made fibers, with negligible NO<sub>x</sub>. Polyester Staple Fibers made from polymers containing low levels of sulfur may produce SO<sub>x</sub> when incinerated. A non-hazardous ash which passes the Toxic Chemical Leachate Procedure should be produced. Further information on incineration is available upon request.

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

Polyester staple fibers and fabrics are not regulated on hazardous wastes under the Comprehensive Environmental 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.

### 14. TRANSPORTATION INFORMATION

#### SHIPPING INFORMATION:

- DOT – Class Not Regulated.
- Sea – IMDG (International Maritime Dangerous Goods) – Class Not Regulated.
- Air – ICAO (International Civil Aviation Organization) – Class Not Regulated.

### 15. REGULATORY INFORMATION

#### U.S. FEDERAL REGULATIONS:

- Polyester staple fiber is considered an "article" under provision of TSCA. All non-exempt chemical substances incorporated into the product or applied to the surface are included in the TSCA Inventory of Chemical Substances compiled by the U.S. Environmental Protection Agency (EPA).
- Occupational Safety and Health Act (OSHA): Polyester staple fiber is considered an "article" under provision of the OSHA Hazard Communication Standard (29 CFR 1910.1200). 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 staple fiber contains no chemicals in concentrations reportable under Section 313 of EPCRA.
- Clean Air Act Amendments of 1990: Polyester staple 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.

#### STATE REGULATIONS:

- California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): Polyester Staple Fiber contains no reportable substances known to the State of California to cause cancer or reproductive toxicity. Polyester fiber and staple products are not considered CA Proposition 65 carcinogens since titanium dioxide and carbon black used in these products are expected to remain bound within the product matrix during normal use of these products.

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- Pennsylvania and New Jersey Right-To-Know Laws: Polyester Staple Fiber contains may contain carbon black and titanium dioxide, which are listed on both the New Jersey and Pennsylvania Right-To-Know regulatory lists.

<b>16. ADDITIONAL INFORMATION</b>
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Products may contain up to 0.4 percent titanium dioxide as a light scattering agent to impart white color. When incorporated into the fiber, DAK Americas does not believe titanium dioxide presents a significant hazard.

The data in this 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.

Dacron® is a registered trademark of DuPont, licensed Alpek Polyester USA, LLC. Delcron®, AirLoft®, HydroPur®, & SteriPur® are registered to Alpek Polyester USA, LLC.

**SDS Revision Date:** September 1, 2023

End of SDS

## MEDICAL CAUTION BULLETIN NO. I

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DO NOT USE MATERIALS PRODUCED BY ALPEK POLYESTER BUSINESSES IN MEDICAL APPLICATIONS INVOLVING **PERMANENT, BRIEF, OR TEMPORARY IMPLANTATION** IN THE HUMAN BODY OR PERMANENT CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES, UNLESS THE MATERIAL HAS BEEN PROVIDED DIRECTLY FROM AN ALPEK POLYESTER BUSINESS UNDER A CONTRACT WHICH EXPRESSLY ACKNOWLEDGES THE CONTEMPLATED USE.

ALPEK POLYESTER MAKES NO REPRESENTATION, PROMISE, EXPRESS WARRANTY OR IMPLIED WARRANTY CONCERNING THE SUITABILITY OF THESE MATERIALS FOR USE IN THE HUMAN BODY OR IN CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES.

**THE CONTENT OF ALPEK POLYESTER MATERIAL IS NOT CERTIFIED FOR IMPLANTS.**

Alpek Polyester materials are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. Alpek Polyester has not performed clinical testing of these materials for implantation. Alpek Polyester will not provide to customers making implantable devices any notice concerning its materials, as specified under 21 CFR section 820.50, or any other information necessary for medical device use of the materials under any other statute or FDA regulation. Alpek Polyester has neither sought, nor received, approval from the FDA for the use of these materials in implantation in the human body or in contact with internal body fluids or tissues.

**ALL IMPLANTABLE MEDICAL DEVICES CARRY A RISK OF FAILURE AND ADVERSE CONSEQUENCES.**

The medical judgment of a physician, a medical device seller and the FDA should be relied upon for identification of both harmful consequences and life-saving benefits from an implantation device comprised of specific materials. These benefits and risks can be found in published medical cases performing clinical medical studies of an implantable medical device. Alpek Polyester does not support the use of its products in these applications and cannot weigh the benefits against the risk defined in these articles. Alpek Polyester cannot offer a medical judgment on the safety or efficacy of the use of its materials in such devices.

**DO NOT MAKE REFERENCE TO THE ALPEK POLYESTER NAME OR ANY ALPEK POLYESTER BUSINESS TRADEMARK IN ASSOCIATION WITH AN IMPLANTABLE MEDICAL DEVICE.**

Do not use a trademark or licensed trademark from Alpek Polyester or any of its businesses as the descriptive name of an implantable medical device (e.g. do not call it the "Delcron<sup>®</sup>" prosthesis, or do not call it a "Laser+<sup>®</sup> device").

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End of Bulletin