



**DAK Americas LLC
Material Safety Data Sheet**

MSDS NUMBER: DK0006
REVISION: 01/21/2008

POLYETHYLENE TEREPHTHALATE DUST
Dust from any polyester product including Laser+™, amorphous, other Resin
products and all polyester staple products

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

MATERIAL IDENTIFICATION:

Laser+™ is a registered trademark of DAK Americas LLC.

COMPANY IDENTIFICATION:

MANUFACTURER/DISTRIBUTOR:

DAK Americas LLC
5925 Carnegie Blvd.
Charlotte, NC 28209

PHONE NUMBERS:

| | | |
|-------------------------------|-------------------------|----------------|
| Product Information | Inside North Carolina: | 1-800-682-2016 |
| | Outside North Carolina: | 1-800-227-6335 |
| Transport Emergency: CHEMTREC | | 1-800-424-9300 |

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COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS:

| Material | CAS Number | % |
|----------------------------|------------|------|
| POLYETHYLENE TEREPHTHALATE | 25038-59-9 | >99% |
| FILLERS | | <1% |

Components (Remarks): Ingredients not precisely identified are proprietary or non-hazardous.

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- Clear to grayish-white, odorless powder possible mixed with pellets or fibers.
- High concentrations of dusts may be an explosion hazard.
- Thermal processing may release irritating gases or fumes.

POTENTIAL HEALTH EFFECTS:

- Eye contact with Polyethylene Terephthalate particles may cause mechanical irritation with discomfort, tearing, scratching or blurring of vision.
- Patch tests with humans resulted in no skin irritation or skin sensitization.
- Decomposition products caused by overheating Polyethylene Terephthalate may cause skin, eye or respiratory tract irritation.

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CARCINOGENICITY INFORMATION:

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES:

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. Dust may cause respiratory irritation. For high concentrations of dust, use a NIOSH approved respirator. Call a physician if necessary.

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.

NOTE TO PHYSICIAN: Treat burns as thermal burns

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FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Flash Point: Not Applicable
Auto-ignition: No Data Available

Physical operations, such as grinding, can create dust and a potential dust explosion hazard. Under these conditions, follow National Fire Protection Association Code and Standards for handling combustible dusts.

EXTINGUISHING MEDIA:

Water Fog, Foam, Carbon Dioxide, and Dry Chemical.

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.

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SPILL CLEAN UP:

Sweep up and recover, or mix material with moist absorbent and shovel into suitable chemical waste container.

HANDLING AND STORAGE

HANDLING (PERSONNEL):

Do not breathe vapors or fumes that may be evolved during processing. Material can be handled hot/molten. Contact can cause burns. Avoid contact with molten material.

HANDLING (PHYSICAL ASPECTS):

Avoid excess air-borne dust generation.

EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

- Use local ventilation to control fumes from hot processing.
- Use static controls. Static charges can build up and ignite dust or solvent laden atmospheres. Design precautions into processes that can create dust, such as pneumatic conveying systems, grinding and other physical operations. There is the potential for a dust explosion hazard.

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PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION:

Wear coverall chemical-splash goggles when the possibility exists for eye or face contact from airborne dust material.

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/m³, 8 Hr. TWA, total dust

5 mg/m³, 8 Hr. TWA, respirable dust

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* 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.

- DAK AMERICAS ACCEPTS DUPONT'S AEL.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DATA:

| | |
|---------------------|---------------------------|
| Melting Point | No Data Available |
| Vapor Pressure | Not Applicable |
| Vapor Density | Not Applicable |
| Solubility in Water | Insoluble |
| Ph | Not Applicable |
| Specific Gravity | 1.3-1.4 |
| % Volatiles | Negligible |
| Form | Pellets or Molten Polymer |
| Color | Clear to grayish white |
| Odor | Odorless |

STABILITY AND REACTIVITY

CHEMICAL STABILITY:

Stable at normal conditions.

INCOMPATIBILITY WITH OTHER MATERIALS:

Incompatible or can react with strong oxidizers.

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Prevent Dust Explosions by:

- Keeping dust levels low
- Keeping oxygen levels low by filling dust-containing equipment with an inert gas such as nitrogen
- Avoiding ignition sources such as high temperatures

DECOMPOSITION:

Combustion products include carbon dioxide and carbon monoxide. Thermal decomposition products can include acetaldehyde and ethylene.

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.
- Toxic effects from short exposures by inhalation resulted in no adverse effects.
- Toxic effects from short exposures by ingestion resulted in no adverse effects.
- Animal testing indicates that Polyethylene Terephthalate does not have carcinogenic, mutagenic, developmental or reproductive effects.

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ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

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

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.

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- Under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a Hazardous waste (40 CFR 261.20-24).
- If discarded in its purchased form, this product does not meet the RCRA characteristic definition for ignitability, corrosivity or reactivity and is not a RCRA listed waste, however, it has not been tested by the Toxicity Characteristic Leaching Procedure (TCLP).
- SARA, Title III: This material is not known to contain extremely hazardous substances.

OTHER INFORMATION

Additional Information

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.

| | |
|--------------------------|---------------------------------------|
| Responsibility for MSDS: | Cape Fear MSDS Coordinator |
| Address: | 3500 Daniels Road Leland, NC 28451 |
| Telephone: | 1-910-371-4000 |

See DAK Americas Caution Statement on next page.

End of MSDS

CAUTION

DAK Americas LLC Caution Bulletin No. 1

DO NOT USE DAK AMERICAS MATERIALS IN MEDICAL APPLICATIONS INVOLVING **PERMANENT IMPLANTATION** IN THE HUMAN BODY OR PERMANENT CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES.

DO NOT USE DAK AMERICAS MATERIALS IN MEDICAL APPLICATIONS INVOLVING **BRIEF OR TEMPORARY IMPLANTATION** IN THE HUMAN BODY OR CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES UNLESS THE MATERIAL HAS BEEN PROVIDED DIRECTLY FROM DAK AMERICAS UNDER A CONTRACT WHICH EXPRESSLY ACKNOWLEDGES THE CONTEMPLATED USE.

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

THE CONTENT OF DAK AMERICAS MATERIAL IS NOT CERTIFIED FOR IMPLANTS. DAK Americas materials are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. DAK Americas has not performed clinical testing of these materials for implantation. DAK Americas will not provide to customers making implantable devices any notice concerning its materials, as specified under 21 C.F.R section 820.81, or any other information necessary for medical device use of the materials under any other statute or FDA regulation. DAK Americas 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.

DO NOT MAKE REFERENCE TO THE DAK AMERICAS NAME OR ANY DAK AMERICAS TRADEMARK IN ASSOCIATION WITH AN IMPLANTABLE MEDICAL DEVICE. Do not use a DAK Americas trademark as the descriptive name of an implantable medical device (e.g. do not call it the "Dacron®" prosthesis").

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

Regarding implantation of materials, you should rely upon the medical judgment of the physician, the medical device seller and the FDA. Do not rely upon DAK Americas. Examples of both harmful consequences and life-saving benefits from the implantation of various materials can be found in published medical performing clinical medical studies of an implantable medical device, DAK Americas cannot weigh the benefits against the articles. Without risks of that device and cannot offer a medical judgment on the safety or efficacy of the use of our material in that device.

End of Bulletin