



MATERIAL SAFETY DATA SHEET



1. Product and Company Identification

Material name Nylon 6,6 Fiber
Version # 1.0
Revision date 12-Feb-2009
MSDS Number 1868
Synonym(s) 6-6 Nylon; CORDURA® Nylon; Nylon 6-6 Fiber; Nylon Industrial Fiber; Nylon Polyamide Fiber; White Dyeable Nylon

2. Composition / Information on Ingredients

Components	CAS #	Concentration
NYLON 66 POLYAMIDE	32131-17-2	90 - 99 %
FIBER LUBRICANTS	Mixture	0 - 4 %
WATER	7732-18-5	0 - 5 %
TITANIUM DIOXIDE	13463-67-7	0 - 5 %
CARBON BLACK	1333-86-4	0 - 5 %
COLOR CONCENTRATE	Mixture	0 - 2 %

Composition comments

Preparation - not a pure substance.

May have been produced with Carbon Black. Carbon Black is not water soluble and is encapsulated. It is not extracted or released in normal processing. Therefore Carbon Black in this material does not present a hazard in normal handling, processing use and disposal.

May have been produced with Titanium Dioxide. Titanium Dioxide is not water soluble and is encapsulated. It is not extracted or released in normal processing. Therefore Titanium Dioxide in this material does not present a hazard in normal handling, processing use and disposal.

3. Hazards Identification

Emergency overview

Low hazard for usual industrial or commercial handling.

When the fiber products are cut, chopped, or manipulated in other similar handling methods, some dust may be produced.

General hazard information

This fiber may have been produced with carbon black and/or titanium dioxide. These compounds, as present in this material, are not water soluble and are encapsulated in the polymer. They are not extracted or released in normal processing and handling. Therefore these compounds are not expected to present a hazard in normal handling, processing, use and disposal.

OSHA regulatory status

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information for the safe handling and proper use of the product.

Potential health effects

Eyes

Fiber particles and dusts may be mechanically irritating when in contact with eyes. Symptoms include itching, burning, redness and tearing.

Skin

Not expected to be a primary skin irritant.

Fiber particles and dusts may be mechanically irritating to skin. While irritation is not expected under normal use, prolonged exposure and continuous rubbing of fiber particles on skin may produce skin irritation. Symptoms of mechanical irritation may include redness and/or itching.

Inhalation

Health injuries are not known or expected under normal use.

Ingestion

Not a likely route of entry. Ingestion of large amounts of fibers may cause gastrointestinal blockage which can cause stomach distress.

4. First Aid Measures

First aid procedures

Eye contact

Flush eyes with water as a precaution. If irritation persists get medical attention.

Skin contact

Product is not expected to be hazardous by skin contact. Should irritation occur rinse with water.

Inhalation

No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

Ingestion

If swallowed, do NOT induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Consult a physician if necessary.

Notes to physician

Treat symptomatically.

5. Fire Fighting Measures

General fire hazards

This product is combustible at high temperatures.

Flammable properties

May burn, but does not ignite readily.

Extinguishing media

Suitable extinguishing media

Dry chemical, CO₂, water spray or regular foam. Do not use straight streams.

Protection of firefighters

Protective equipment and precautions for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products

Irritating and toxic gases or fumes may be released during a fire. Traces of hydrogen cyanide may be found in fire conditions.

Auto-ignition temperature 851 °F (455 °C) ASTM D1929

Flammability limits in air, lower, % by volume Not Determined

Flammability limits in air, upper, % by volume Not Determined

Flash point 788 °F (420 °C) ASTM D1929

6. Accidental Release Measures

Personal precautions

Spilled or displaced fibers may present a tripping hazard.

Methods for cleaning up

Sweep up or gather material and place in appropriate container.

7. Handling and Storage

Handling

Use care in handling/storage.

Storage

Keep away from heat, sparks, and flame.

Further information

When fiber products are cut, chopped, or manipulated in other similar handling methods, some dust may be produced. Use good housekeeping methods to keep accumulation of dust to a minimum.

8. Exposure Controls / Personal Protection

Exposure guidelines

Engineering controls

Use local exhaust ventilation. Keep formation of airborne dusts to a minimum.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields.

Skin protection

Wear suitable protective clothing. When material is heated, wear gloves to protect against thermal burns.

Respiratory protection

When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate respiratory protection must be provided.

General hygiene considerations

Use good industrial hygiene practices in handling this material. Wash hands before breaks and at the end of workday.

9. Physical & Chemical Properties

Color	Based on specification.
Odor	Slight.
Auto-ignition temperature	851 °F (455 °C) ASTM D1929
Decomposition temperature	788 - 1652 °F (420 - 900 °C) 50% at 420°C; 96% at 900°C
Flammability limits in air, lower, % by volume	Not Determined
Flammability limits in air, upper, % by volume	Not Determined
Flash point	788 °F (420 °C) ASTM D1929
Melting point	491 - 509 °F (255 - 265 °C)
Molecular weight	19,000 - 30,000
Odor threshold	Not Determined
pH	Not Applicable
Solubility (H2O)	0 %
Specific gravity	1.13 - 1.25
Vapor density	na 0 (air=1)

10. Chemical Stability & Reactivity Information

Chemical stability

Stable, however, may decompose if heated.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

This product may react with strong oxidizing agents.

11. Toxicological Information

Toxicological information

Animal testing indicates that this material is not a skin irritant. This material has not been tested for skin sensitization. This fiber may have been produced with carbon black and/or titanium dioxide. These compounds, as present in this material, are not water soluble and are encapsulated in the polymer. They are not extracted or released in normal processing and handling. Therefore these compounds are not expected to present a hazard in normal handling, processing, use and disposal.

Carcinogenicity

Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA. Carbon Black (airborne particles of respirable size) is a listed carcinogen. Carbon Black used in production of this material is encapsulated and not believed to have the potential to become of respirable size.

Titanium dioxide (airborne particles of respirable size) is a listed carcinogen by IARC (2B). Titanium dioxide used in products of this material is not believed to have the potential to become of respirable size.

Further information

The product itself has not been tested.

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Further information

The product itself has not been tested.

12. Ecological Information

Ecotoxicity

This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. Based on similar substances, this material is expected to be essentially non-biodegradable.

Environmental effects

Based on the physical properties of this product, significant environmental persistence and bioaccumulation would not be expected.

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13. Disposal Considerations

Disposal instructions

Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Not regulated as dangerous goods.

General

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

15. Regulatory Information

United States Regulations

Federal Regulations

Product, as supplied, is an article under TSCA.

All components are on the U.S. EPA TSCA Inventory List.

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State Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance

No

International Regulations

Not a poison under the Standard for the Uniform Scheduling of Drugs and Poisons - Australia.

Not dangerous according to the criteria found in Guidelines on Prevention and Control of Chemical Hazard - Singapore.

As an article the product does not need to be labelled in accordance with EC-directives or respective national laws.

16. Other Information

HMIS ratings

Health: 0
Flammability: 1
Physical hazard: 0

NFPA ratings

Health: 0
Flammability: 1
Instability: 0

Disclaimer

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This disclaimer shall be effective to the extent allowed by law. Should any provision be deemed to be ineffective or unenforceable, that provision shall be deemed severed from the disclaimer and the remaining provisions shall continue to have full force and effect.

MSDS sections updated

Product and Company Identification: Alternate Trade Names

Composition / Information on Ingredients: Ingredients

Regulatory Information: United States

Issue date

12-Feb-2009