MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name **Nylon 6,6 Fiber**
Version # 1.0
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MSDS Number 46264
Manufacturer
Company Information INVISTA (Canada) Company
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2. Hazards Identification

Emergency overview WARNING
Product may form explosive dust/air mixtures if high concentration of product dust is suspended in air.

This product is supplied as a fiber. When the fiber products are cut, chopped, or manipulated in other similar handling methods, some dust may be produced. Exposure to powder or dusts may be irritating to eyes, nose and throat.

Potential health effects

Routes of exposure Inhalation. Skin contact. Eye contact. Ingestion.

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

Skin 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 Dusts of this product may cause irritation of the nose, throat, and respiratory tract. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.

Ingestion Ingestion of large amounts of fibers may cause gastrointestinal blockage which can cause stomach distress.

Chronic effects Not expected to occur.
Potential environmental effects None known.

3. Composition / Information on Ingredients

Components	CAS #	Concentration
NYLON 66 POLYMER	32131-17-2	90 - 99 %
CARBON BLACK	1333-86-4	0-0.1; 0.1-1, 1-5%
FIBER FINISH	Mixture	0-0.1; 0.1-1, 1-2%
PIGMENTS	Mixture	0-0.1; 0.1-1, 1-3%
TITANIUM DIOXIDE	13463-67-7	0-0.1; 0.1-1, 1-5%

Composition comments 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.

4. First Aid Measures

First aid procedures

Eye contact	Rinse immediately with plenty of water, also under the eyelids. If irritation persists get medical attention.
Skin contact	Product, at ambient conditions, is not expected to be hazardous by skin contact. Should irritation occur, rinse with water.
Inhalation	If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop. If breathing is difficult, give oxygen.
Ingestion	If swallowed, do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. Consult a physician if necessary.
Notes to physician	Provide general supportive measures and treat symptomatically.
General advice	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties	Dusts at sufficient concentrations can form explosive mixtures with air.
Extinguishing media	
Suitable extinguishing media	Dry chemical, CO2, water spray or regular foam. Apply extinguishing media carefully to avoid creating airborne dust.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Protection of firefighters	
Specific hazards arising from the chemical	Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons. Traces of hydrogen cyanide may be found in fire conditions. Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.
Protective equipment for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Explosion data	
Sensitivity to static discharge	Not expected to be shock sensitive.
Sensitivity to mechanical impact	None known.
Hazardous combustion products	Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons. Traces of hydrogen cyanide may be found in fire conditions.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Use personal protective equipment.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Clean up in accordance with all applicable regulations. Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Large Spills: Sweep up and shovel into suitable containers for disposal. Avoid dispersal of dust in air. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Small Spills: Sweep up or gather material and place in appropriate container. Never return spills to original containers for re-use.
Other information	None known.

7. Handling and Storage

Handling

Use care in handling/storage.

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. Minimize dust generation and accumulation. Do not breathe dust from this material.

Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA-654). Take measures to prevent the build up of electrostatic charge.

Storage

Keep the container tightly closed and dry. To maintain product quality, do not store in heat or direct sunlight. Keep from freezing. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep in a well-ventilated place. Guard against dust accumulation of this material.

Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

8. Exposure Controls / Personal Protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Engineering controls

Keep formation of airborne dusts to a minimum. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Eye / face protection

Wear dust goggles.

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. In the case of respirable dust and/or fumes, use self-contained breathing apparatus.

9. Physical & Chemical Properties

Appearance

Physical state	Solid.
Form	Fibers.
Color	Based on specification.
Odor	Odorless.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Boiling point	Not available.
Melting point/Freezing point	Not available.
Solubility (water)	Not available.
Specific gravity	Not available.
Relative density (liquid)	Not available.
Flash point	Not available.

Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Minimize dust generation and accumulation. Avoid heat, sparks, open flames and other ignition sources.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Hydrogen cyanide (hydrocyanic acid). Nitrogen oxides (NOx). Carbon oxides. Ammonia gas may be liberated at high temperatures.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.

11. Toxicological Information

Toxicological information	Due to this material's high molecular weight, and results of toxicity studies of similar products, this material is considered to be of little to no toxicological concern.
Acute effects	Based on available data, the classification criteria are not met.
Eye contact	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
Chronic effects	None known.
Carcinogenicity	Based on available data, the classification criteria are not met. Carbon Black (airborne particles of respirable size) is a listed carcinogen by IARC (2B). 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 production of this material is not believed to have the potential to become of respirable size.
Mutagenicity	Based on available data, the classification criteria are not met.
Reproductive effects	Based on available data, the classification criteria are not met.
Symptoms and target organs	Inhalation: Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Skin: 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 may include redness, drying of skin, itching and pain. Contact with molten material may cause thermal burns. Eyes: Fiber particles and dusts may be mechanically irritating when in contact with eyes. Symptoms include itching, burning, redness and tearing. Ingestion: Ingestion of large amounts of fibers may cause gastrointestinal blockage which can cause stomach distress.
Further information	Exposure to powder or dusts may be irritating to eyes, nose and throat.

12. Ecological Information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulation / Accumulation	No data available for this product.
Mobility in environmental media	No data available.

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

DOT

Not regulated as dangerous goods.

15. Regulatory Information

Canadian regulations	This material is not a "controlled product" under the Canadian Workplace Hazardous Materials Information System (WHMIS).
WHMIS status	Non-controlled

16. Other Information

HMIS® ratings	Health: 0 Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 0 Flammability: 1 Instability: 0

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