



Safety Data Sheet

Hazard Communication Safety Data Sheets – Black and Orange Twine

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products.

Section 1, Identification:

Product Codes:	Black/Orange Monofilament
Product Name/Synonyms:	Tree Rope
Chemical Description:	Polyolefin fiber
Manufacturer Address:	100 South Fabpro Way PO Box 517 Kingman, KS 67068
Telephone:	620-532-4000

Section 2, Hazard(s) identification:

Health Effects:

Eyes:	None known.
Skin:	None known.
Inhalation:	N.A.
Ingestion:	N.A.

Emergency overview

NO PARTICULAR HAZARDS KNOWN

Keep container tightly closed.

Avoid ingestion.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

Section 3, Composition/information on ingredients:

Components	Percent by Weight	C A S No.	***Exposure Limits***	
			TWA (8 Hour)	Short Term (15 Min.)
Proprietary Polyolefin Blend	100%	9003-07-0	Not Established	

The composition of this material is proprietary.

This material as sold is not hazardous per 29 CFR 1910.1200 criteria.

Section 4, First-aid measures:

First Aid Procedures:

Eyes:	If irritation occurs, flush eyes immediately with large amounts of water for at least 15 minutes and continue flushing until irritation subsides. If redness or irritation persists, contact a physician.
Skin:	Use good personal hygiene and wash thoroughly after handling. If redness or irritation persist, contact a physician.
Inhalation:	If difficulties occur after vapor/aerosol has been inhaled, remove to fresh air and seek medical attention.
Ingestion:	Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment neededNote to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Section 5, Fire-fighting measures:

Flash Point (Specify Method):	N.A.	Flammable (Explosive) Limits (Percent by Volume)
Flammability Class:	N.A.	Lower Explosive Limit: N.A.
Fire Extinguishing Media:	Foam, Water spray, Carbon Dioxide, Dry Chemical	Upper Explosive Limit: N.A.

Unsuitable Fire Extinguishing Media
(for safety reasons): Water Jet

Special Fire Fighting Procedures: None

Special hazards arising from the substance or mixture: Hazards during firefighting (carbon monoxide, carbon dioxide, harmful vapors, nitrogen oxides, fumes/smoke, carbon black)

Unusual Fire & Explosion Hazards: None known; expected to be similar to ordinary combustible.

Section 6, Accidental release measures:

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Do not breathe vapor/aerosol/spray mists. Sources of ignition should be kept well clear. Handle in accordance with good building materials hygiene and safety practice.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with inert absorbent material (e.g. clay or diatomaceous earth). Place absorbed material in the same container as the spilled substance/product for disposal.

Section 7, Handling and storage:

Handling: None
Avoid aerosol formation. Avoid inhalation of mists/vapors. Avoid skin contact. No special measures necessary provided product is used correctly.

Storage:
Avoid storing near strong oxidizers.
Avoid sources of ignition.
Use caution when stacking to avoid unstable conditions.
Store at temperatures below 140°F
Store in a sprinklered warehouse.

Section 8, Exposure controls/personal protection:

Eye Protection: Safety glasses with side-shields
Gloves: Chemical resistant protective gloves.
Respiratory: None required. Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) respirator as necessary.
Body protection: Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:

In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the

skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

Section 9, Physical and chemical properties:

Appearance and Odor:	Fiber; black and orange in color without any odor
Odor Threshold:	N.A.
Boiling Point:	N.A.
Specific Gravity (Water=1):	approx. 0.91 (at 25 Deg. C)
Freezing Point:	N.A.
Vapor Density (Air=1):	N.A.
pH:	N.A.
Vapor Pressure (mm of mercury):	N.A.
Solubility in Water:	N.A.
Evaporation Rate:	N.A.

Section 10, Stability and reactivity:

General Reactivity:	Stable
Incompatibility (Materials to Avoid):	Strong acids, strong bases, strong oxidizing agents.
Hazardous Decomposition Products:	Not tested; expected to be similar to ordinary combustion.
Hazardous Polymerization:	..X.. Will Not Occur Will Occur
Conditions to Avoid:	See SDS section 7 – Handling and storage

Section 11, Toxicological information:

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after single ingestion. Based on available Data, the classification criteria are not met.

Irritation/Corrosion

Assessment of irritating effects: No irritation is expected under intended use and appropriate handling. Based on available Data, the classification criteria are not met.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No reliable data was available concerning repeated dose toxicity. Based on available Data, the classification criteria are not met.

Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Reproductive toxicity

Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Teratogenicity

Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Other Information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Section 12, Ecological information*

Ecotoxicity:

Based on available Data, the classification criteria are not met for aquatic toxicity. There is a high probability that the product is not acutely harmful to aquatic organisms.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Inherently biodegradable. The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants.

Bioaccumulative potential

Assessment bioaccumulation potential

Discharge into the environment must be avoided.

Mobility in soil

Assessment transport between environmental compartments

No data available.

Additional information

Other ecotoxicological advice:

Ecological data are not available. Do not allow to enter soil, waterways or waste water channels.

Section 13, Disposal considerations*

Waste Disposal Methods:

Dispose in accordance with Federal, State and local regulations. Be aware that state and local requirements may differ widely depending on location and may in many cases be different from federal rules.

When a decision is made to discard this material as supplied, it does not meet RCRA's (Resource Conservation and Recovery Act) characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33. The toxicity characteristic (TC), however, has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

Section 14, Transport information*

Shipping Information:

Shipments of fibers are not regulated by the U.S. Department of Transportation (DOT). There is no identification number. No special labels are required.

Section 15, Regulatory information*

U.S. Federal Regulations

OSHA:

This SDS is provided to comply with provisions of the Hazard Communication Standard (29 CFR 1910.1200).

EPA:

TSCA:

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory, 8(b).

CERCLA Information (40CFR 302.4):

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
100 LBS	75-56-9; 123-91-1	Propylene oxide; 1,4-dioxane
10 LBS	75-21-8	Ethylene Oxide

CLEAN AIR ACT AMENDMENTS OF 1990:

This product and its packaging do not contain, nor are they manufactured with, any of the ozone-depleting substances listed in either Class I chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform) or Class II (hydrochlorofluorocarbons) of the Clean Air Act Amendments of 1990.

FDA:

This product is not registered with the FDA. Therefore, it is not approved for use as articles or components of articles intended for repeated contact with food.

USDA:

This product has not been evaluated by USDA for use in packaging material in direct contact with meat or poultry food products prepared under federal inspection.

State Regulations

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

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:

Health: 0 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 0 Flammability: 1 Physical hazard: 0

Section 16, Other information:

Hazard Rating	Scale
Health 0	4 = Extreme
Fire 1	3 = High
Reactivity 0	2 = Moderate
Special ---	1 = Slight
	0 = Insignificant

Ratings are based on Great Lakes Polymer Technologies guidelines, and are intended for internal use.

References Documentation: Component MSDS(s)

The Book of Chemical Lists on CD-ROM, February 2006

Important Notice:

All statements, technical information and recommendations set forth herein are based on information or tests which Great Lakes Polymer Technologies believes to be reliable as of the date of this material safety data sheet. However, nothing contained in this information is to be taken as a representation, guarantee, or warranty, for which Great Lakes Polymer Technologies bears legal responsibility. Great Lakes Polymer Technologies urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application(s).

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.

Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists

OSHA = Occupational Safety and Health Administration

TLV = Threshold Limit Value

PEL = Permissible Exposure Limit

TWA = Time Weighted Average

STEL = Short-Term Exposure Limit

EPA = Environmental Protection Agency

IARC = International Agency for Research on Cancer

NTP = National Toxicology Program

FDA = Food & Drug Administration

USDA = United States Department of Agriculture