TANGENT®
SUSTAINABLE LUMBER

Fiber Reinforced Molded Lumber (MF)
Safety Data Sheet (SDS)

Section 1: Product and Company Information

MANUFACTURER: Tangent Technologies, LLC - 2424 Armour Road, P.O. Box 609, Worthington, MN 56187-0609

TRADE NAME: Fiber Reinforced Molded Lumber (Black)

SYNONYMS: Polyethylene, Polyolefin, Composite Plastic Lumber

RECOMMENDED USE: Construction and Building Material

Emergency Phone Number: 507.372.5558

Other Calls: 800.721.9037

Section 2: Hazards Identification

Signal Word:	None
Physical Hazards:	Not Classified
Health Hazards:	Not Classified
Pictogram:	None
Precautionary Statement:	Handling and/or processing of this material may generate dust which may cause mechanical irritation of the eyes, skin, nose and throat. High dust concentrations have a potential for combustion or explosion. When heated to decomposition it emits acrid smoke and irritating fumes.
Storage:	Do not store near heat, open flames, strong oxidants or alkalis. Store flat and well supported across the entire span.
Disposal:	Recycling is the preferred method.
Environmental Hazards:	None. However, it is recommended to be mindful of generated shavings, dust, and drop cut fragments during processing as they are not biodegradable and will remain in situ.
Hazards Not Otherwise Classified:	Manufactured lumber ingredients are non-respirable, and may cause temporary skin and mucous membranes irritation due to mechanical abrasion effect of fibers. Under normal conditions of use, these products may release dust and non-respirable fibers (Particles Not Otherwise Regulated). Under severe process conditions (e.g. shredding, crushing), these products may release very small amount of respirable particulate, some of which may be fiber-like in terms of l/d ratio. See Section 8 for Exposure Limit Data.
Supplemental Info:	The components of this product are embedded in an impervious polymer matrix and therefore present a negligible exposure risk under normal conditions of processing and handling.

Section 3: Composition / Information on Ingredients

Component	CAS Number	% Concentration
Polyethylene	9002-88-4	Trade Secret*
Fibrous glass (E-glass)	65997-17-3	Trade Secret*
Carbon Black (PBK7)	1333-86-4	Trade Secret*
Proprietary Ingredient*	Trade Secret*	<1

** The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret.*

Section 4: First Aid Measures

General Advice:	No hazards which require special first aid measures.
Inhalation:	If affected by fumes from heated material, remove from source of exposure and move the affected person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin Contact:	If burned by contact with hot material, flush skin immediately with large amounts of cold water. If possible, submerge area in cold water. No attempt should be made to detach polymer adhering to the skin or to remove clothing attached with molten material. Thermal burns require immediate medical attention. Cold Material: Wash with soap and water.
Eye Contact:	None
Ingestion:	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Section 5: Firefighting Measures

Suitable Extinguishing Media:	Water fog, dry chemical, foam, carbon dioxide, dry chemicals
Specific Hazards Arising from the Substance or Mixture:	Acrid smoke and fumes

Section 5: Firefighting Measures (cont.)

Special Protective Equipment and Precautions for Firefighters:	None
Special Hazards Arising from Substance or Mixture:	None
Advice for Firefighters:	Wear positive pressure self-contained breathing apparatus (SCBA)
Auto-ignition Temperature:	>824°F (440°C)
Melting Point Temperature:	266°F (130°C)

Section 6: Accidental Release Measures

Emergency Action:	Not Applicable
Spill/Leak Procedure:	Not Applicable
Disposal:	Not Applicable
Notification:	Not Applicable

Section 7: Handling and Storage

Handling:	Do not store near heat, open flames, strong oxidants or alkalis. Store flat and well supported across the entire span.
Storage:	This product can be maintained at a temperature less than or equal to 150^{0}F.

Section 8: Exposure Controls / Personal Protection

Component Exposure Limits:	
Engineering Controls:	Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne dust levels below recommended exposure limits.

Section 8: Exposure Controls / Personal Protection (cont.)

Eye and Face Protection:	Safety glasses with side shields. Use dust goggles if high dust concentration is generated.
Skin Protection:	Hot material: Wear heat-resistant protective gloves, clothing and face shield that are able to withstand the temperature of the molten product.
Respiratory Protection:	Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne dust levels below recommended exposure limits.
Other Protective Clothing or Equipment:	Safety glasses with side shields. Use dust goggles if high dust concentration is generated.

EXPOSURE GUIDELINES: OCCUPATIONAL EXPOSURE LIMITS (OEL)

Component	CAS Number	OSHA PEL TWA	ACGIH TLV TWA
Polyethylene	9002-88-4	5 mg/m^3 Total dust	10 mg/m^3
Fibrous glass (E-glass)	65997-17-3	5 mg/m^3	5 mg/m^3
Carbon Black (PBK7)	1333-86-4	3.5 mg/m^3	3.5 mg/m^3 Total dust
Proprietary Ingredient	Trade Secret	Not Established	Not Established

Section 9: Physical and Chemical Properties

Appearance/ Physical State:	black plastic
Specific Gravity:	(H2O=1): 0.93
pH:	Not Determined
Solubility in Water:	Insoluble
Odor:	Slight Olefinic
Odor Threshold:	Not Determined
Melting Point:	266°F (130°C)
Boiling Point:	N/A
Initial Boiling Point (F/C):	N/A

Flash Point:	>640°F (338°C)
Upper/Lower Flammability Limits:	N/A
Auto-Ignition Temperature:	>824°F (440°C)
Decomposition Temperature:	572°F (300°C)
Vapor Pressure (mmHg):	N/A
Vapor Density (AIR=1):	N/A
Partition Coefficient:	N/A
Viscosity:	N/A
Critical Temperature:	N/A

Section 10: Stability and Reactivity

Reactivity:	None known
Chemical Stability:	Stable under normal conditions of use
Possibility of Hazardous Reactions:	Hazardous polymerization not indicate
Conditions to Avoid:	Heat, sparks, open flame
Incompatible Materials:	Perchlorethylene, Trichlorethylene, Xylene
Hazardous Polymerization:	Will Not Occur
Hazardous Decomposition Products:	Trace levels of low molecular weight hydrocarbon fragments, carbon dioxide, carbon monoxide, and irritating fumes and gases.

Section 11: Toxicological Information

Route(s) of Entry/Exposure:	Inhalation, skin, eye, ingestion
Inhalation (Acute, Immediate):	Stable under normal conditions of use
Inhalation (Chronic, Delayed):	Hazardous polymerization not indicate
Skin (Acute, Immediate):	Heat, sparks, open flame
Skin (Chronic, Delayed):	Perchlorethylene, Trichlorethylene, Xylene
Eye (Acute, Immediate):	Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in the eyes.
Eye (Chronic, Delayed):	No data available.
Ingestion (Acute, Immediate):	Excessive concentrations to nuisance dust in the workplace may cause mechanical irritation to mucous membranes.
Ingestion (Chronic, Delayed):	No data available.

Component	CAS Number	Acute Toxicity	NTP	IARC	OSHA
Polyethylene	9002-88-4	oral rat LD50: >8 gm/kg	N/A	N/A	N/A
Fibrous glass (E-glass)	65997-17-3	No Data Available	Not Listed	Group 3	X-Present
Carbon Black (PBK7)	1333-86-4	oral rat LD50: >10 gm/kg	N/A	2B	N/A
Trade Secret	Proprietary	oral rat LD50: >6400 mg/kg	N/A	N/A	N/A

Section 12: Ecological Information

Ecotoxicity:	This product is not classified as environmentally hazardous.
Persistence and Biodegradability:	This product is expected to persist in the environment and to not biodegrade.
Bioaccumulative Potential:	This product is not expected to bioaccumulate through food chains in the environment.
Mobility in Soil (to groundwater):	This product is lighter than water and will float at or near the surface. Soil mobility is expected to be negligible, because the product is insoluble in water.

Section 13: Disposal Considerations

Waste Disposal Method:	This product is assimilated with urban waste. Dispose of in accordance with all applicable local and national regulations. Recycling is the preferred method.

Section 14: Transport Information

UN Name/Number:	None
Transport Hazard Class:	None
DOT (US):	Not regulated as a hazardous material.

SPECIAL NOTE: Tarping over the product on open transport trailers is good practice to prevent static electricity buildup due to airflow over product. Poorly grounded axles may lead to electrolytes in engine coolant to absorb buildup, thus decreasing engine coolant performance.

IMDG:	Not regulated as a hazardous material for maritime shipping.
IATA:	Non-Hazardous for Air Transport

Section 15: Regulatory Information

CONEG:	In Compliance
CERCLA (Comprehensive Response Compensation and Liability Act):	Not Regulated
SARA Title III (Superfund Amendments and Reauthorization Act):	
311/312 HAZARD CATEGORIES: Non-hazardous **313 REPORTABLE INGREDIENTS:** This product does not contain any hazardous ingredients at or above the regulated thresholds.	
Ozone Depleting Substances:	In compliance with 40 CFR 82, no reportable substances.
CONSUMER PRODUCT SAFETY COMMISSION:	In compliance with Consumer Product Safety Improvement Act of 2008 (Children's Product Safety).
California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):	**WARNING!** This product contains a chemical known to the state of California to cause cancer.
Carbon Black (PBK7) CAS# 133-86-4 **Glass wool fibers (inhalable and biopersistent)** CAS# None	
International Regulations:	N/A

HMIS SYSTEM:

GHS SYSTEM:

Danger ☐ Warning ☐

Molded Lumber

HEALTH	5	
PHYSICAL	4	
PHYSICAL	5	
TARGET ORGAN EFFECTS	5	

PERSONAL PROTECTIVE EQUIPMENT

Danger ☐ Warning ☐

Molded Lumber

HEALTH	5	
PHYSICAL	4	
ENVIRONMENTAL	5	
TARGET ORGAN EFFECTS	5	

PERSONAL PROTECTIVE EQUIPMENT

Section 16: Other Information

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