



jb martin

MATERIAL SAFETY DATA SHEET

SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical product identification:

Fiber Glass reinforcement (fabric) – TG54N

Chemical Name: Mixture

CAS No: None Assigned

Product Name: TG54N - E-Glass fabric

Product Use: Reinforcement for various resin systems

Weaver: *jb martin ltée*
445 St-Jacques
St-Jean-sur-Richelieu
Québec, Canada
J3B 2M1
Tel.: (450) 346-6853

Raw material: **CertainTeed Corporation**
P.O. Box 860
Valley Forge PA 19482-0101
Tel.: (610) 341-7137
9 am – 5 pm (Eastern Time – USA)

EMERGENCY TELEPHONE: CHEMTREC (800) 424-9300

SECTION II: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name : Glass, oxide, chemicals

CAS No: 65997-17-3

Common Name: Textile Fiber Glass: Continuous Filament Glass Fibers

Percent in products: Approx. 98% by

LD₅₀: N/A

LC₅₀: N/A

Exposure Limits:	<u>OSHA PEL</u> Total Nuisance Dust: 15 mg/m ³ Respirable Nuisance Dust 5 mg/m ³	<u>ACGIH TLV TWA</u> Total Glass Dust: 10 mg/m ³	<u>NIOSH REL</u> Total Glass Dust: 5mg/m ³ Respirable Fibers 3 f/cc
Chemical Name:	Organic Polymer Solids (cured)		
CAS No:	None Assigned		
Common Name:	Size-materials-cured		
LD₅₀:	N/A		
LC₅₀:	N/A		
Exposure Limits:	<u>OSHA PEL TWA</u> None	<u>ACGIH TLV TWA</u> None	<u>NIOSH REL</u> None

SECTION III: HAZARD IDENTIFICATION

EMERGENCY OVERVIEW				<u>Degree of Hazard</u>
	Health	Fire	Reactivity	
NFPA Rating:	0	0	0	0- Minimal (insignificant)
NMIS Rating:	1	0	0	1- Slight
				2- Moderate
				3- Serious (High)
				4- Severe (Extreme)
				*- Chronic Health Effect(s)
<i>(see section XVI for acronyms)</i>				
POTENTIAL HEALTH EFFECTS				
Primary Routes of Entry : Inhalation, skin and eye contact.				
Acute Inhalation: Temporary upper respiratory irritation.				
Chronic Inhalation: None Known				
Acute skin Contact and sensitization: Temporary skin irritation seen in certain individuals.				
Chronic skin Contact : None Known				
Skin Absorption: None				
Acute Eye Contact: Temporary eye irritation.				
Chronic eye Contact : None Known				
Acute Ingestion: Unlikely. Contact physician if unusual reaction is noted.				
Chronic Ingestion: None Known.				
Medical Conditions which may be aggravated: Pre-existing conditions which may be aggravated by mechanical irritants upon inhalation or skin contact.				
Carcinogenicity:				
Ingredients: Textile or continuous fibrous glass				
NTP: Not listed				
IARC: Not classifiable – Group 3				
OSHA: Not listed				
Mutagenicity: None				
Teratogenicity : None				
Reproductive Toxicity: None				
Toxicological Synergistic Products: None				

SECTION IV: FIRST AID MEASURES

Inhalation:	Remove from exposure. Get medical help if irritation persists.
Eye contact:	Flush well with running water for at least 15 minutes. Get medical help if irritation persists.
Skin contact:	Clean with soap and warm water. Get medical help if irritation persists.
Ingestion:	Unlikely. Consult physician if unusual reaction is noted.
Fires:	Remove to fresh air. Administer oxygen and get medical help.
Information for Medical Practitioners:	Skin irritation responds well to mild hydrocortisone cream.

SECTION V: FIRE FIGHTING MEASURES

Flash Point (°F) and Method:	Does not support combustion.
Flammable limits:	LEL: N/A UEL: N/A
Autoignition temperature:	Does not support combustion.
Extinguishing media:	Use that which is applicable to surrounding fire.
Special fire fighting procedures:	Fire fighters must wear full protective gear including eye protection and self-containing breathing apparatus.
Unusual fire and explosion hazard:	Size materials may thermally decompose or burn emitting toxic fumes and smokes including carbon dioxide and carbon monoxide.

SECTION VI: ACCIDENTAL RELEASE MEASURES

Spill/leaks:	Vacuum dust deposit.
Accidental or unplanned releases:	Clean area with vacuum or wet method.

SECTION VII: HANDLING AND STORAGE

Handling: When handling and/or applying this product: <ul style="list-style-type: none">Wear long sleeves, gloves and caps.Wear eye protection (goggles, safety glasses or face mask).Use a NIOSH/MSHA-approved dust respirator such as a 3M model #8710 or #9900 or equivalent. After handling and/or applying this product: <ul style="list-style-type: none">Bathe with soap and warm water.Wash work clothes separately and rinse washer after use. Storage: Store under cover to protect product.

SECTION VIII: EXPOSURE CONTROL/PERSONNAL PROTECTION

Personal protective equipment:

Respirators: Wear NIOSH/MSHA approved respirators when handling and applying fiber glass products in accordance with the following NIOSH based exposure guidelines:

<u>Exposure</u>	<u>Respirator (or equivalent)</u>
Less than 10 times NIOSH REL	3M 8710 or 3M 9900
Less than 50 times NIOSH REL	MSA Ultra Twin Full-Face Respirator with type H filter (HEPA)

Product Package Label:

CAUTION:

Skin irritation: Fiber glass may cause temporary skin irritation. Wear long sleeves, gloves and eye protection when handling and applying material. Cleanse skin with soap and warm water after handling. Wash work clothes separately and rinse washer.

Dust irritation: A disposable mask designed for nuisance type dusts must be used when handling and applying material in order to prevent irritation to the nose or throat due to dust and airborne particles.

Work practice and engineering controls: Avoid spread of fiber glass dust. For some fabrication operations where dust is generated, provide general and/or local exhaust ventilation to control airborne dust levels below exposure limits.

Other: When glass fiber is used as a reinforcement in plastic materials, caution must also be exercised with the resin and curing catalysts employed and the mixing process used to disperse the fiber in the resin. When the glass fiber reinforced material is abraded or machined, control of the released dust must be established.

Additional respiratory protection may be necessary for protection from vapors and mists emitted from these resins and catalysts.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid	Vapor density (Air = 1):	Not measurable
Boiling point (°F):	>1600°F	Specific gravity (H₂O = 1):	Glass = 2,6
Melting point (°F):	>1600°F	Evaporative rate (ethyl ether = 1):	Does not have vapor pressure
Softening point (°F):	Approx. 1550°F	Vapor pressure:	Does not have vapor pressure
Freezing point:	None	% volatile by volume (mmHg@20°C):	Not volatile
Odor:	None	% solubility (in water):	Small
Odor threshold:	None	pH:	Neutral
Color:	White	Coefficient of water to oil distribution:	None
Appearance:	Fibers assembled into fabrics.		

SECTION X: REACTIVITY

Stability:	Chemically stable.
Corrosivity:	Not corrosive.
Reactivity:	Not reactive.
Reactivity with water:	Not reactive.
Incompatible substance:	Hydrofluoric acid.

SECTION XI: TOXICOLOGICAL INFORMATION

Extensive medical-scientific research has been conducted regarding the health aspect of fiber glass over the past 50 years. The International Agency for Research on Cancer (IARC), an agency of the World Health Organization (WHO), at a meeting in June 1987, reviewed all the significant research on the health effects attributed to fiber glass.

IARC determined that the data from both human and animal studies was inadequate to classify continuous filament glass fibers, such as used in our Fiber Glass Reinforcement products, as carcinogenic to humans.

IARC classified glass wool, which is used in some insulation products, as a category 2B, "possibly carcinogenic to humans." This classification was based largely on animal implantation experiments. For further information on glass wool products, refer to CertainTeed's fiber glass wool products Material Safety Data Sheets. These are available from the address cited on page 1.

SECTION XII: ECOLOGICAL INFORMATION

This product is not manufactured with, nor does it contain any Class I Ozone depleting chemicals as defined by EPA in Title VI of the Clean Air Amendments of 1990 40 CFR Parts 82, Protection of Stratospheric Ozone. This product is not classified as a hazardous air pollutant in Title III Clean Act of 1990.

SECTION XIII: WASTE DISPOSAL CONSIDERATIONS

Scrap material should be disposed of in sanitary landfill in accordance with federal, state and local regulations. Waste material is not considered hazardous as defined by RCRA (40 CFR Part 261).

SECTION XIV: TRANSPORTATION INFORMATION

National Motor Freight Classification (NMFC): 1714100, Rovings or yarn, glass fibre; or strand, glass fibre in continuous lengths or chopped; in packages.

SECTION XV: REGULATORY INFORMATION

As this product is considered a mixture, each component is listed below identifying its status on specific regulatory lists.

CHEMICAL Name	Fiber glass textile 65997-17-3	2-Butenedioic Acid (E)-, Polymer with 1,2-... 39382-21-3	2-Butenedioic Acid (E)-, Polymer with .α,... 39382-25-7	Polyester resin CAS: proprietary
SARA Title III Section 313	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SARA Title III Section 302	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CA Proposition 65	<input checked="" type="checkbox"/> [†]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canada DSL	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Canada NDSL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Korea KECI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Europe EINECS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Japan MITI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Philippines PICCS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Australia AICS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
USA TSCA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

[†] listed as glass wool fibers/airborne particulates of respirable size.

SECTION XVI: ADDITIONAL COMMENTS

Acronyms/definitions used in this MSDS:

ACGHI:	American Conference of Government Industrial Hygienists
CAS No:	Chemical Abstracts Service Number
EPA:	Environmental Protection Agency
f/cc:	Fibers per cubic centimeter
HEPA:	High Efficiency Particulate Air (filter)
HMIS:	Hazardous Material Identification System
IARC:	International Agency for Research on Cancer
LC ₅₀ :	The air concentration of a substance, when administered over a specified time period in an animal assay, is expected to cause the death of 50% of a defined animal population.
LD ₅₀ :	The single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause the death of 50% of a defined animal population.
LEL:	Lower Explosive Limit
mg/m ³ :	Milligrams per cubic meter
MSHA:	Mine Safety & Health Administration
N/A:	Not Applicable
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit
RCRA:	Resource Conservation and Recovery Act
REL:	Recommended Exposure Limit
SARA:	Superfund Amendments and Reauthorization Act
Title III:	Emergency Planning and Community Right to Know Act Section 302 – Extremely Hazardous Substances Section 313 – Toxic Chemicals
TLV:	Threshold Limit value
TSCA:	Toxic Substance control Act (USA)
TWA:	Time Weighted Average
UEL:	Upper Explosive Limit
WHO:	World Health Organization

Australia AICS:	Australian Inventory of Chemical Substances
CA proposition 65:	California Title 22, Division 2, Chapter 3 Safe Drinking Water and Toxic Enforcement Act of 1986
Canada DSL:	Canadian Domestic Substance List
Canada NDSL:	Canadian Non-domestic Substance List
Europe EINECS:	European Inventory of Existing Commercial Chemical Substances
Japan MITI:	Ministry of International Trade and Industry
Korea KECI:	Korean Existing Chemicals Inventory
Philippines PICCS:	Philippine Inventory of Chemicals and Chemical Substances
Respirable Dust:	The respirable fraction of suspended airborne particulates

Respirable Fibers:	Suspended airborne particulates with diameters of 3 micrometers or less, lengths of 5 micrometers or more and 5:1 length-to-width aspect ratio (NIOSH 7400 method, B rules)
Total Dust:	Suspended airborne particles of “nuisance” dusts including those of non-respirable size.
Total Glass Dust:	Suspended airborne particles of dust composed of glass only, including those of non-respirable size.

The technical department