



Ryertex

Material Safety Data Sheet

Product: Grade G10 / FR4 – epoxy glass laminate

Composition: Epoxy laminate reinforced with fiberglass substrate.

Hazards:

These materials are nonflammable. Fumes, if decomposed, may irritate eyes, nose or throat. These materials will dust when machined, punched or drilled and may cause skin or eye irritation. There are no hazardous ingredients at reportable levels found in this product.

Potential Health Hazards:

Skin:	Dust may cause moderate skin irritation.
Eyes:	Dust and/or fumes may cause moderate eye irritation.
Inhalation:	Fibrous glass dust could be released when machined. The TLV per ACGIH for fibrous glass dust is 10 mg/m ³ TWA for particles <5 microns in diameter
Ingestion:	Not evaluated
Delayed Effects	This product is reinforced with continuous filament fiberglass. Dust Generated from machining would not be expected to produce respirable particles. IARC considers continuous glass filaments as unclassified or non-carcinogenic.

First Aid Measures

Skin:	Wash off dust in streaming water or shower. Change clothing covered in dust.
Eyes:	Irrigate with streaming water for minimum of 15 minutes. If irritation persists, contact a doctor.
Inhalation:	Move to fresh air source if overcome with dust or smoke. If not breathing, provide mouth-to-mouth resuscitation and call a Doctor.
Ingestion:	If large amounts are ingested, consult a doctor
Note to Doctor	Treat symptomatically

Fire Fighting

These materials may give off toxic gases of formaldehyde and phenol when burning or when heated to decomposition. Firemen should wear protective equipment and positive pressure self-contained breathing equipment. Use water, CO₂ and dry chemical to extinguish fire.

Accidental Release Measures: Not applicable

Handling & Storage: Material has no shelf life.
Should be stored in dry locations

Exposure Controls: Use exhaust ventilation to control dust.

- Skin Protection:** No precautions are necessary for brief contact with dust. Clean body covering clothing can be used.
- Eye Protection:** Use gloves/aprons with prolonged or frequent exposure. Use appropriate eye protection as is customary with manufacturing and production operations.
- Respiratory Protection:** Atmospheric levels of fibrous glass dust should be maintained below exposure levels. When respiratory protection is required, use a HIOSH-approved respiratory.

Exposure Guidelines:

Ingredient Name	CAS#	CGIH TLV	OSHA PEL
Fibrous Glass Dust	(65997-17-3)	10mg/m ³	None

Physical and Chemical Properties:

Materials are a solid, flat sheet with light green colors.

Stability and Reactivity: This product is considered stable.

Hazardous Decomposition Products:

CO, CO₂, Hbr, & Oxides of Nitrogen if heated in excess of 300C

Toxicological Data

Ingredients of this material may cause moderate eye, skin and/or throat irritation.

Delayed Effects:

NTP has determined that respirable size glasswool may be reasonably anticipated to be a carcinogen. IARC has classified glasswool as a possible carcinogen. This product is reinforced with continuous filament fiberglass. Dust generated from machining would not be expected to produce respirable particles. IARC considers continuous glass filaments as unclassifiable or non-carcinogenic.

Ecological and disposal issues

These materials do not biodegrade and are not considered a RCRA hazardous waste if discarded. Disposal must be made in accordance with applicable local, state and federal regulations. All information is offered for the shipped/delivered product and any use or alteration such as mixing with other materials may change the characteristics of the materials and alter the RCRA classification and disposal method.

Regulatory / Transport Information

The resin components used to make these materials are on the TSCA inventory list and are not regulated by the US DOT. There are no SARA 313 toxic chemicals used to make this material.

Other Data:

The toxicity of the combustion products was evaluated against compared to Douglas Fir. The LC50 (Probit Analysis) was 40.4 mg/L for this material. The LC50 of the reference material, Douglas Fir, is 27.1 mg/L.

Other information:

Contact customer service at 800-541-0251