



MATERIAL SAFETY DATA SHEET

INDUSTRIES 3R

IDENTITY

Part Number: **TXP 660**
 Identity: Braided fibreglass tubing
 Description: Continuous filament fiberglass
 Other Generic Names: None

SUPPLIER

Industries 3R inc.
 55, route 116 Ouest
 Danville (Québec) J0A 1A0
 Tel: 819-839-2793
 Fax: 819-839-2797

<u>INGREDIENTS AND HAZARDS</u>	<u>% WEIGHT</u>	<u>CAS No</u>
<u>Hazardous Ingredients</u>		
Fiberglass (non respirable)*1	98-100	65997-17-3
<u>Nonhazardous Ingredients</u>		
Size*2	0-2	N/A

Note: *1 – As manufactured continuous filament glass fibers are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards. See Section “Exposure controls and special protection” of Safety Data Sheet for exposure limit data. ***2** - See Section “Regulatory information” of SDS for concentrations of California Proposition 65 chemicals and other regulatory information relative to this product(s).

Component Related Regulatory Information: This product may be regulated, have exposure limits or other information identified as the following: glass wool fiber, fibrous glass and nuisance particulates.

PHYSICAL DATA

Melting Point (Softening): >800°C
 Boiling Point (°C): N/A (Not Applicable)
 Specific Gravity (Bare Glass): 2.60
 Vapor Pressure (mm Hg @ 20°C): N/A
 Vapor Density (Air=1): N/A
 Evaporative Rate (n-Butyl Acetate=1): N/A
 VOC: <0.4%
 Freezing point: N/A
 Viscosity: N/A
 Solubility in water: Not soluble
 Appearance and odor: White/off-white/tan colored solid with no odor
 pH: N/A

FIRE AND EXPLOSION DATA

Flash Point: None
 Flash Point Method: Not determined
 Upper Flammability Limit: None

Lower Flammability Limit: None

Flammability Classification: Non-flammable

Vapor Density (Air = 1): Not Applicable

Extinguishing Media: Water fog, foam, carbon dioxide (CO₂) or dry chemical.

Unusual Fire and Explosion Hazards: None known.

Fire Fighting Instructions: Use self-contained breathing apparatus (SCBA) and full bunker turnout gear in a sustained fire.

Hazardous Combustion Products: Primary combustion products are carbon monoxide, hydrogen, carbon dioxide and water. Other undetermined compounds could be released in small quantities.

REACTIVITY DATA

Stability: This is a stable material.

Conditions to Avoid: None known.

Incompatible Materials: None known.

Hazardous Decomposition Products: Sizings or binders may decompose in a fire. See Section 5 of SDS for information on hazardous combustion products.

Hazardous Polymerization: Will not occur

HEALTH HAZARD INFORMATION

Emergency Overview : No unusual conditions are expected from this product.

Primary Route(s) of Exposure: Inhalation, lungs, skin, eye.

Potential Health Effects

Inhalation: Dusts and fibers from this product may cause mechanical irritation of the nose, throat and respiratory tract.

Skin Contact: Dusts and fibers from this product may cause temporary mechanical irritation to the skin.

Eye Contact: Dusts and fibers from this product may cause temporary mechanical irritation to the eyes.

Ingestion: Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Medical Conditions Aggravated by Exposure: Chronic respiratory and skin conditions may temporarily worsen from exposure to this product.

Chronic Conditions: See Section "Toxicological information" for additional information.

FIRST AID MEASURES:

Inhalation: Move person to fresh air. Seek medical attention if irritation persists.

Skin Contact: For skin contact, wash with mild soap and cold water. Do not wash with warm water because this will open up the pores of the skin, which will cause further penetration of the fibers. Use a washcloth to help remove fibers. To avoid further irritation, do not rub or scratch affected areas. Rubbing or scratching may force fibers into skin. If irritation persists get medical attention.

Eye Contact: Immediately flush eyes with plenty of running water for at least 15 minutes. If irritation persists get medical attention.

Ingestion: Ingestion of this material is unlikely. If it does occur, watch the person for several days to make sure that intestinal blockage does not occur.

DISPOSAL PROCEDURES

Disposal: Dispose of waste material in accordance with federal, state and local regulations.

SPECIAL PROTECTION

Exposure Controls / Personal Protection

A: General product information: Follow all applicable exposure limits.

B: Exposure limits:

Fiber glass continuous filament (65997-17-3)

Ingredient	OSHA PEL (8-hr TWA)	ACGIH TLV (8-hr TWA)
Non-respirable fibers and particulate	15 mg/m ³ (total dust) (a)	5 mg/m ³ (inhalable fraction)
Respirable particulate	5 mg/m ³ (respirable dust) (b)	3 mg/m ³ (PNOC)*
Respirable particulate with fiber like dimensions (glass shards)	None established	1 fiber/cm ³ Aspect ration >5:1
Size	None established	None established

*PNOC = particles not otherwise classified

Ventilation: General dilution ventilation and/or local exhaust ventilation should be provided, as necessary, to maintain exposures below occupational exposure limits. **Adequate ventilation must be provided at elevated temperatures.**

Personal protective equipment

Respiratory Protection: A properly fitted NIOSH approved N 95 series disposable dust respirator such as the 3M model 8210 (model 8271 in high humidity environments) or equivalent should be used when: high dust levels are encountered; the level of glass fibers in the air exceeds the occupational exposure limits, or if irritation occurs.

Skin Protection: Normal work clothing (long sleeved shirt and long pants) is recommended. Use gloves. Skin irritation is known to occur chiefly at pressure points such as around the neck, wrist and waist.

Eye/face Protection: Wear safety glasses, goggles or face shields.

HANDLING AND STORAGE

Handling procedures: Keep product in its packaging, as long as practicable to minimize potential dust generation. Keep work areas clean. Avoid unnecessary handling of scrap materials. Wear PPE as described in section *Special protection*.

ACCIDENTAL RELEASE MEASURES

Containment procedures: This material will settle out of air. If concentrated on land, it can be scooped up for disposal as non-hazardous waste. This material will sink and disperse along the bottom of waterways and ponds. It cannot easily be removed after it is waterborne; however the material is non-hazardous in water.

Clean-up procedures: Scoop up the material and put into a suitable container for disposal as non-hazardous waste.

Response procedures: Isolate area. Keep personnel away.
Special procedures: None.

ECOLOGICAL INFORMATION

This material is not anticipated to harm animals, plants or fish.

TOXICOLOGICAL INFORMATION

Acute effects:

General product information

Dust may cause mechanical irritation of the eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. People with pre-existing respiratory conditions, may experience difficulty breathing, congestion and chest tightness.

Carcinogenicity:

Fiber glass continuous filament: The International Agency for research on Cancer (IARC) in June, 1987, categorized fiber glass continuous filament as not classifiable with respect to human carcinogenicity (group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify fiber glass continuous filament as a possible, probable, or confirmed cancer causing material.

The American conference of Governmental Industrial Hygienist (ACGIH) A4 classification, not classifiable as a human carcinogen, for respirable continuous filament glass fibers is based on inadequate data in terms of its carcinogenicity in humans and/or animals.

For respirable continuous filament glass fibers, a TLV-TWA of 1 fiber/cc was adopted to protect workers against mechanical irritation. The TLV-TWA of 5 mg#m³ was adopted for nonrespirable glass filament fiber, measured as inhalable dust, to prevent mechanical irritation of the upper respiratory tract.

Note: There are no known chronic health effects connected with long-term use or contact with these products.

Products that are chopped, crushed or severely mechanically processed during manufacture or use may contain a very small amount of respirable glass fiber-like fragments. NIOSH defines respirable fibers as greater than 5 microns in length and less than 3 microns in diameter with an aspect ratio of $\geq 5:1$ (length-to-width ratio).

Component Carcinogenicity

Fiber Glass continuous filament (65997-17-3)

ACGIH: A4 – Not classified as a human carcinogen.

IARC: Group 3 “not classified as to its carcinogenicity to humans”

October 2001 meeting

ADDITIONAL INFORMATION

The information, details, dimensions and values indicated are to our best knowledge. We recommend testing according to local conditions. The specifications are subject to change without notice.