



Section 1 - Product and Company Identification

Product Name: DUCT WRAP

Manufacturer Information:

Quietflex Manufacturing Company LP
4518 Brittmoore Road
Houston, Texas 77041 USA
(713) 849-2163
www.quietflex.com

Health and emergency contact:

Quietflex Environmental, Health, & Safety Information (7am--5pm CST): 1-713-849-2163 x200
Emergencies CHEMTREC (24 hours everyday): 1-800-424-9300

Section 2 - Composition / Components Information

COMPONENT	PERCENT BY WEIGHT
Fiberglass wool (fibrous glass)	85 - 99
Urea, polymer with formaldehyde and phenol	1 - 15

Usage: thermal and acoustical insulation (home/ industrial). This material is considered as non hazardous provided the remaining components (type and quantity) do not affect product classification.

Section 3 - Hazard Identification

General information: salmon, white, yellow, or tan fibrous material with faint resin odor. Some products have a vinyl, kraft paper, foil, polyester-glass, or polypropylene facing.
Acrid smoke may be generated in a fire. Hydrogen chloride may be released from vinyl faced products during fire.

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.

Medical Conditions Aggravated by Exposure: Chronic respiratory or skin conditions may temporarily worsen from exposure to these products.

Chronic Effects: There is no known chronic health effect related to long-term use or contact with these products.

Carcinogenic Information: Section 11.

OSHA Regulatory Status: Section 15

Potential Environmental Effects: Section 12

Section 4 - First Aids Measures

Inhalation: Remove the affected person to fresh air. If irritation persists get medical attention.

Skin Contact: Wash with mild soap and running water. 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 the skin. If irritation persists get medical attention. Never use compressed air to remove fibers from the skin. If fibers are seen penetrating from the skin, the fibers can be removed by applying and removing adhesive tape so that the fibers adhere to the tape and are pulled out of the skin.

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 partial or complete intestinal obstruction does not occur. Do not induce vomiting unless directed to do so by medical personnel.

Section 5 - Fire-Fighting Measures

<i>Flash Point</i>	None
<i>Flash Point Method:</i>	Not applicable
<i>Upper Flammability Limit:</i>	Not applicable
<i>Lower Flammability Limit:</i>	Not applicable
<i>Flammability Classification:</i>	Non-flammable
<i>Extinguishing Media:</i>	Dry chemical, foam, carbon dioxide, water fog.
<i>Unusual Fire & Explosion Hazards:</i>	These products may release acrid smoke in a sustained fire.
<i>Fire-Fighting Instructions:</i>	Use self-contained breathing apparatus (SCBA) and full bunker turnout gear in a sustained fire.
<i>Hazardous Combustion Products:</i>	Primary combustion products are carbon monoxide, carbon dioxide, ammonia, and water. Other undetermined compounds could be released in small quantities.
<i>Unsuitable Extinguishing Media:</i>	None
<i>Special Hazards Arising from the Chemical</i>	Vinyl faced products will release hydrogen chloride
<i>NFPA</i>	Health 2 Flammability 0* Reactivity 0 Special Instructions: none (* Unfaced glass fiber)
<i>NFPA</i>	Health 2 Flammability 2* Reactivity 0 Special Instructions: none (* some facing and packaging materials are flammable)

Section 6 - Accidental Release Measures

Containment Procedures: This material will settle out of the air. If concentrated on land, it can then be scooped for disposal as a 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 material and put into a suitable container for disposal as a non-hazardous waste.

Response Procedures: Isolate area. Keep unnecessary personnel away. If dusty conditions exist, wear a face mask approved for use with dusts such as 3M 8210, N95 or equivalent.

Special Procedures: None.

Environmental Precautions: This product is not regulated under RCRA Hazardous Waste Regulations. It may be disposed in a landfill. Comply with federal, state and local regulations.

Section 7 – 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. Do not breathe dust. Wear personal protective equipment.

Storage Procedures: Material should be kept dry and under cover.

Special Sensitivity or Incompatibility: Hydrofluoric acid will react with and dissolve glass.

Section 8 – Exposure controls / Personal protection

1- Exposure Guidelines:

General Product Information: Follow all applicable exposure limits.

Component Exposure Limits: ACGIH and OSHA exposure limit lists have been checked for those components with CAS registry numbers.

Fiber Glass Wool (Fibrous Glass) (65997-17-3)

ACGIH : 1 f/cc TWA for respirable fibers longer than 5 urn with a diameter less than 3 urn., (Listed under "Synthetic vitreous fibers") (related to Glass wool fibers) 10 mg/m³ TWA (inhalable particulate), 3 mg/m³ TWA (respirable particulate) (These values are for particulate matter containing no asbestos and <1 % crystalline silica) (related to Particulates not otherwise classified (PNOC))

OSHA : 1 fiber/cc (respirable) TWA (a) (See Note Below) (related to Glass wool fiber)

Ontario TWAEV : STEL - 0.6mg/m³; TWA - 0.05 mg/m³; TWA - 1 f/cc

Mexico: TWA - 0.15mg/m³

Notes: (a) Voluntary PEL was established by the North American Manufactures Association (NAIMA) and OSHA per the Health and Safety Partnership Program (HSPP) agreement for Synthetic Vitreous Fibers (SVF).

Formaldehyde (50-00-0)

ACGIH : 0.3 ppm cielorasos

OSHA : 2 ppm STEL
25 ppm TWA

Ammonia (7664-41-7)

ACGIH : 35 ppm STEL
25 ppm TWA

OSHA : 50 ppm TWA

Carbon Monoxide (630-08-0)

ACGIH : 25 ppm TWA
OSHA : 50 ppm TWA

Ventilation: General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below regulatory limits. Dust collection systems should be used in operations involving cutting or machining and may be required in operations using power tools, or other dust generating process.

2 - Personal protection

Respiratory Protection:

Fiber Glass Wool. A properly fitted NIOSH or MSHA approved N 95 series disposable dust respirator such as the 3M model 821 0 (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; irritation occurs; or installing or removing any of these

products in poorly ventilated spaces. As an extra precaution you may choose, but are not required, to wear a disposable dust respirator at all times.

Hot Use Applications: When the temperature of the surface being insulated exceeds 250°F (121 °C), including initial system startup, the binder in these products may undergo various degrees of decomposition depending on the temperature of the application. The need for respiratory protection will vary according to the airborne concentration of the decomposition products released and accumulated in the area.

If the insulation is installed on hot surfaces above 250°F (121°C), but below 650°F (343°C), a full-face respirator with cartridges approved for protection against organic vapors (or formaldehyde if available) should be used. In areas with good general and/or local exhaust ventilation where exposures are controlled below the formaldehyde, carbon monoxide, and ammonia PEL or STEL, and additive effects have been factored in, then respiratory protection is normally not needed.

Use respiratory protection in accordance with respirator manufacturer's instructions and in accordance with your company's respiratory protection program, local regulations and OSHA regulations under 29 CFR 1910.134.

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

Eyes/Face Protective Equipment: Wear safety glasses with side-shields, goggles or face shield.

Section 9 – Physical and Chemical Properties

Appearance:	Fibrous
Odor:	Organic
Physical State:	Solid
pH:	Not applicable
Vapor Pressure (mm Hg @	
Vapor Density (Air=1):	Not applicable
20 C):	Not applicable
Flash Point:	Not available
Boiling Point:	Not available
Melting point/range	Not available
Flammability Limits in Air	Not applicable
Solubility (H ₂ O):	Insoluble
Specific Gravity(Water=1):	Not applicable
Freezing Point:	Not applicable
Evaporation Rate (n-Butyl acetate =1)	Not applicable
Viscosity:	Not applicable
Additional Information:	No additional information available.

Section 10 – Chemical Stability and Reactivity Information

Stability:	This is a stable material.
Conditions to Avoid:	None expected.
Incompatible Materials:	None expected.
Hazardous Decomposition Products:	Primary combustion products are carbon monoxide, carbon dioxide, ammonia, and water. Other undetermined compounds could be released in small quantities.
Hazardous Polymerization:	Will not occur.

Section 11 – Toxicological Information

This product contains a component which is listed by IARC, OSHA or NTP.

Acute and Chronic Toxicity:

-General Product Information

Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. Higher exposures may cause difficulty breathing, congestion, and chest tightness.

-Component Analysis - LD50/LC50

Urea, polymer with formaldehyde and phenol (25104-55-6)

Oral LD50 Rat: 7 gm/kg

Oral LD50 Mouse .. 7 gm/kg

Fiber Glass Wool: In October 2001, the International Agency for Research on Cancer (IARC) classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans." The 2001 decision was based on human studies and animal research that have not shown an association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease. This classification replaces the IARC finding in 1987 of a Group B designation "possibly carcinogenic to humans."

In May 1997, the American Conference of Governmental Industrial Hygienists (ACGIH) adopted an A3 carcinogen classification for glass wool fibers. The ACGIH A3 classification considers glass wool to be carcinogenic in experimental animals at relatively high doses, by routes of administration, at sites, or by mechanisms that it does not consider relevant to worker exposure. It also reviewed the available epidemiological studies and concluded that they do not confirm an increased risk of cancer in exposed humans. Overall, the ACGIH found that the available medical/scientific evidence suggests that glass wool is not likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

In 1994, the National Toxicology Program (NTP) classified glass wool (respirable size) as "reasonably anticipated to be a human carcinogen." This classification was primarily based upon the 1987 IARC classification. NTP is currently considering reclassifying this material.

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 > 5:1 (length-to-width ratio).

Carcinogenicity:

General Product Information: No information available for the product.

Component Carcinogenicity: ACGIH, IARC, OSHA, and NTP carcinogen lists have been checked for those components with CAS registry numbers.

Fiber Glass Wool (Fibrous Glass) (65997-17-3)

IARC: Group 3 "not classifiable as to its carcinogenicity to humans" (related to Glasswool) October 2001 Meeting

ACGIH: A3 - animal carcinogen (related to Glass wool fibers)

NTP: Reasonably anticipated to be a human carcinogen (related to glasswool) (possible select carcinogen)

Mexico: A3 Animal carcinogen

Section 12 – Ecological Information

No data available for this product. This material is not expected to cause harm to animals, plants or fish.

Sección 13 – Disposal Considerations

US EPA Waste Number & Descriptions:

- *General Product Information:* This product, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

- *Component Waste Numbers:* No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Contaminated packaging: Recycle, recover, or waste disposal of packaging materials.

Section 14 – Transportation Information

US DOT Information

Shipping Name: Not regulated for transport.

Hazard Class: None

UN/NA #: None

Packing Group: None

Required Label(s): None

TDG Information

Shipping Name: Not regulated for transport.

Hazard Class: None

UN/NA #: None

Packing Group: None

Required Label(s): None

Additional Info.: None

Shipping Name: Not regulated for transport.

IMDG/IMO

RID

ADR

ICAO

IATA

MEX

Additional Transportation Regulations:

No additional information available.

Section 15 – Regulatory Information

US Federal Regulations:

- *General Product Information* : No additional information available.

- *Component Analysis* :

SARA 313 Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) :This material does not contain any chemicals required to be reported under the Act and Title 40 of the Code of Federal Regulation.

SARA 311/312 Hazardous Categorization

Acute Health Hazards yes

Chronic Health Hazards yes

Risk of Ignition no
 Sudden Release of Pressure no
 Reactive Hazard no
Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
 This product does not contain any Hazardous Air Pollutants.

State Regulations:

California Proposition 65: The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
 WARNING! This product contains a chemical known to the State of California to cause cancer.
 State Right-To-Know: CA: Glassfiber wool; MA, MN ,NJ, PA,IL,RI : x

Canada

Component Analysis – WHMIS IDL
 The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:
 Fiber Glass, Wool 65997-17-3 1% item 768 (884) (related to Fibrous Glass)

This product has been classified following the hazard criteria of the Controlled Products Regulations (CPR).
 WHMIS Status Controlled; WHMIS Classification D2A-Carcinogenicity, D2B-Irritation

International

All components are either listed or are exempt (x):
 TSCA Glass Fiber – Wool 65997-17-3; NDSL present, ELINCS 266-046-0, KECL present, PICCS KE-17630, AICS GEN-0994 Present; DSL xu; EINECS x; ENCS x; China x.
 TSCA Urea, polymer with formaldehyde and phenol 25104-55-6; NDSL present, ELINCS x, KECL present, PICCS KE-35185, AICS Present, China 7-907.

Sección 16 – Other information

Hazard Classification HMIS y NFPA	Categoría	HMIS	NFPA
	Acute Health	1	1
	Flamability	0	2 (facing/package)
	Flamability	0	0 (Unfaced)
	Reactivity	0	0

Unusual Hazards NFPA: None

Personal Protection HMIS: To be supplied as required by users.

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

EPA = Environmental Protection Agency;
 TSCA = Toxic Substance Control Act; (Ley sobre control de sustancias tóxicas)
 ACGIH = American Conference of Governmental Industrial Hygienists; (Conferencia de Higienistas Industriales Gubernamentales de Estados Unidos)
 IARC = International Agency for Research on Cancer; (Agencia Internacional de Investigación sobre el Cáncer)
 NIOSH = National Institute for Occupational Safety and Health;

NTP = National Toxicology Program;(Programa Nacional de Toxicología)
OSHA = Occupational Safety and Health Administration;
NFPA = National Fire Protection Association;
HMIS = Hazardous Material Identification System;
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;
SARA = Superfund Amendments and Reauthorization Act;
DSL = Canadian Domestic Substance List;
EINECS = European Inventory of New and Existing Chemical Substances;
WHMIS = Workplace Hazardous Materials Information System;
CAA = Clean Air Act
WHO = World Health Organization (Organización Mundial de la Salud);
IATA = International Air Transport Association (Asociación Internacional de Transporte Aéreo);
RID = European Rail Transport (Transporte Europeo por Tren);
ADR = European Road Transport (Transporte Europeo por Carretera);
IMO = International Maritime Organization (Organización Marítima Internacional);
MEL = Maximum Exposure Limits (Límites Máximos de Exposición);
TWA = Time Weighted Average (Promedio Ponderado de Tiempo);
STEL = Short-term Exposure Limit (Límite de exposición a corto plazo)

Revision Summary

This MSDS was developed for the new Duch Wrap product. 9/18/09

Additional copies of this MSDS may be obtained by calling (713) 841-2163. Requests may also be made through our website at www.quietflex.com .