

SAFETY DATA SHEET

1. Identification

Material name: TRISOTECH G ROOF INSULATION 2.2"
Material: 305220 550

Recommended use and restriction on use

Recommended use: Article
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S. Roofing
3735 Green Road
Beachwood OH 44122
US

Contact person: EH&S Department
Telephone: 216-292-5000
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Carcinogenicity Category 1B

Unknown toxicity - Health

Acute toxicity, oral	90 %
Acute toxicity, dermal	100 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	100 %

Unknown toxicity - Environment

Acute hazards to the aquatic environment	100 %
Chronic hazards to the aquatic environment	100 %

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: May cause cancer.

Precautionary

Statements:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: If exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Fibrous Glass	65997-17-3	5 - <10%
Pentane	109-66-0	1 - <5%
Carbon Black	1333-86-4	1 - <5%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Eye contact: Rinse immediately with plenty of water.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	
Special fire fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	No data available.
Methods and material for containment and cleaning up:	Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
Notification Procedures:	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling:	Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required.
Conditions for safe storage, including any incompatibilities:	Store locked up.

8. Exposure controls/personal protection**Control Parameters
Occupational Exposure Limits**

Chemical Identity	type	Exposure Limit Values	Source
Fibrous Glass - Inhalable fraction.	TWA	5 mg/m ³	US. ACGIH Threshold Limit Values (03 2014)
Fibrous Glass - Fiber.	TWA	1 fibers/cm ³	US. ACGIH Threshold Limit Values (03 2014)
	TWA	1 fibers/cm ³	US. ACGIH Threshold Limit Values (03 2014)
	TWA	1 fibers/cm ³	US. ACGIH Threshold Limit Values (03 2014)
	TWA	1 fibers/cm ³	US. ACGIH Threshold Limit Values (03 2014)
	TWA	1 fibers/cm ³	US. ACGIH Threshold Limit Values (03 2014)
	TWA	0.2 fibers/cm ³	US. ACGIH Threshold Limit Values (03 2014)
Pentane	TWA	1,000 ppm	US. ACGIH Threshold Limit Values (02 2014)
	PEL	1,000 ppm 2,950 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Carbon Black - Inhalable fraction.	TWA	3 mg/m ³	US. ACGIH Threshold Limit Values (2011)
Carbon Black	PEL	3.5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	type	Exposure Limit Values	Source
Fibrous Glass - Fiber.	TWA	0.2 fibers/cm ³	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	1 fibers/cm ³	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)

Fibrous Glass - Inhalable fibers.	TWA	5 mg/m ³	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Fibrous Glass - Inhalable	TWA	5 mg/m ³	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Fibrous Glass - Respirable fibers.	TWA	1 fibers/mL	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Fibrous Glass - Fiber.	TWA	0.2 fibers/mL	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Fibrous Glass - Total dust.	TWA	10 mg/m ³	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Fibrous Glass - Fiber.	TWA	1 fibres/cm ³ (non-asbestos fibres) -- size restrictions apply	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	TWA	2 fibres/cm ³ (non-asbestos fibres) -- size restrictions apply	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Pentane	TWA	600 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Pentane	TWA	600 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Pentane	TWA	120 ppm 350 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Carbon Black - Inhalable	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Carbon Black	TWA	3.5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Carbon Black	TWA	3.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Appropriate Engineering Controls Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.

Individual protection measures, such as personal protective equipment

- General information:** Use personal protective equipment as required.
- Eye/face protection:** Wear goggles/face shield.
- Skin Protection**
 - Hand Protection:** Use suitable protective gloves if risk of skin contact.
 - Other:** No data available.
- Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
- Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance

- Physical state:** solid
- Form:** solid
- Color:** Black
- Odor:** Slight
- Odor threshold:** No data available.

pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	1.1
Solubility(ies)	
Solubility in water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion:	May be harmful if swallowed.
Inhalation:	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact:	Moderately irritating to skin with prolonged exposure.
Eye contact:	Eye contact is possible and should be avoided.

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)****Oral****Product:** ATEmix: 4,000 mg/kg**Dermal****Product:** No data available.**Inhalation****Product:** No data available.**Specified substance(s):**

Pentane LC 50 (Rat, 4 h): 364 mg/l

Repeated dose toxicity**Product:** No data available.**Skin Corrosion/Irritation****Product:** No data available.**Specified substance(s):**

Fibrous Glass in vivo (Rabbit): Experimental result, Key study

Pentane in vivo (Rabbit): Experimental result, Key study

Carbon Black in vivo (Rabbit): Experimental result, Key study

Serious Eye Damage/Eye Irritation**Product:** No data available.**Specified substance(s):**Pentane Irritating
in vivo (Rabbit, 48 hrs): Not irritating
in vivo (Rabbit, 24 hrs): Not irritating
in vivo (Rabbit, 1 hrs): Not irritating
in vivo (Rabbit, 1 hrs): Not irritating

Carbon Black in vivo (Rabbit, 24 - 72 hrs): Not irritating

Respiratory or Skin Sensitization**Product:** No data available.**Carcinogenicity****Product:** May cause cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Fibrous Glass	Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall evaluation: Possibly carcinogenic to humans. Overall evaluation: Possibly carcinogenic to humans.
Carbon Black	Overall evaluation: Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

Fibrous Glass	Reasonably Anticipated to be a Human Carcinogen. Reasonably Anticipated to be a Human Carcinogen.
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US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates**Product:** No data available.**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**

Pentane NOAEL (Oncorhynchus mykiss, 28 d): 6.165 mg/l QSAR QSAR, Key study

Carbon Black NOAEL (Salmo sp., 30 d): 17 mg/l QSAR QSAR, Key study

Aquatic Invertebrates**Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative Potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Specified substance(s):**

Pentane Log Kow: 3.39

Mobility in Soil: No data available.**Other Adverse Effects:** No data available.**13. Disposal considerations****Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.**Contaminated Packaging:** No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Pentane	100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Pentane	100 lbs.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Fibrous Glass	500 lbs
Pentane	500 lbs
Carbon Black	500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Pentane	10000 lbs

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Fibrous Glass
Pentane
Carbon Black

US. Massachusetts RTK - Substance List

Chemical Identity

Fibrous Glass
Pentane

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Fibrous Glass
Pentane

US. Rhode Island RTK

Chemical Identity

Pentane

Other Regulations:

Regulatory VOC (less water and exempt solvent):	0 g/l
VOC Method 310:	0.00 %

Inventory Status:

Australia AICS:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this product are not listed on or exempt from the Inventory.
Ontario Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Taiwan Chemical Substance Inventory:	One or more components in this product are not listed on or exempt from the Inventory.

16. Other information, including date of preparation or last revision**Revision Date:** 09/26/2016**Version #:** 1.1**Further Information:** No data available.**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

