

TC-417 & AF90 Fibre

MATERIAL SAFETY DATA

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Issue or Revision Date: 2010 July 16

Manufacturer/Supplier: ThermaCoustic Industries International Limited
Unit 108, 20119 – 113B Avenue
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604 460 1476

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(Except Canadian Statutory Holidays)

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SECTION 1

PRODUCT IDENTIFICATION AND USE

Product Name: TC-417 thermal and acoustic fibre/*AF90* acoustic fibre
Chemical Name/Family Name: Mixture/fibreglass insulation
Use: Component of TC-417 thermal and acoustic insulation & *AF90* acoustic insulation
CAS Number: None Assigned

SECTION 2

REPORTABLE/HAZARDOUS INGREDIENTS

CAS # Component Percent: 65997-17-3 fibreglass 99% maximum
64742-65-0 or 64742-54-7 distillates (petroleum), solvent dewaxed and/or hydrotreated heavy paraffinic 2.5% maximum

These products are considered hazardous under the OSHA Hazard Communication Standard (29 CFR 910.1200).
These products are controlled products under Canadian WHMIS regulations.

SECTION 3

PHYSICAL DATA

Material State: Mixture
Physical state: Loose glass fibres
Odour & Appearance: No odour; fine, white fibres
Odour Threshold: Not applicable
Vapour Pressure (mm/Hg): Not applicable
Vapour Density: Not applicable
Evaporation Rate: Not applicable
Boiling Point: Not Applicable
Melting Point: 1200°C
Solubility (H²O): Small
Specific Gravity: Glass = 2.5
VOC: Not applicable

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SECTION 4

FIRE AND EXPLOSION DATA

Flammability:	Non-flammable
Flashpoint:	Not applicable
Upper Flammable Limit:	Not applicable
Lower Flammable Limit:	Not applicable
Auto Ignition Temperature:	Not applicable
Sensitivity to Mechanical Impact:	No
Sensitivity to Static Discharge:	No
Extinguishing Media:	Foam, Dry Chemical
Special Fire Fighting Procedure:	None
Explosion or Fire Hazards:	None expected
Hazardous Combustion Products:	Carbon monoxide (from additives to fibre)
NFPA Ratings:	Health: 0 Fire: 0 Reactivity: 0

SECTION 5

HEALTH EFFECTS DATA

Stability:	Stable under normal conditions
Incompatibility:	Hydrofluoric acid
Possible Hazardous Reactions:	None
Hazardous Decomposition Product:	A non-hazardous mineral oil dust suppressant additive in a concentration of < 2.5% may emit carbon monoxide as a decomposition product

SECTION 6

TOXICOLOGICAL PROPERTIES

Route of Entry:	Inhalation, skin and eye contact
Effect of acute exposure to product:	None known
Effect of acute exposure to skin:	May cause skin irritation.
Effect of acute Inhalation:	May cause temporary irritation of upper respiratory tract
Effect of ingestion:	Unlikely, but may cause gastrointestinal irritation. Contact a physician if unusual reaction is noted
Effect of acute eye contact:	May irritate eye tissue.
Medical conditions aggravated by exposure:	Any pre-existing conditions which may be aggravated by mechanical irritants upon inhalation or skin contact.
Effect of long-term exposure:	Unknown.
Carcinogenicity:	Unknown
HMIS Ratings:	Health: 1*; Fire: 0; Physical Hazard: 0

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SECTION 7

PREVENTIVE MEASURES

Personal protective equipment:
Respirator:

Wear disposable or other coveralls, preferably with a hood
Not required under normal conditions, but use of a NIOSH-
approved dust mask (N95) is recommended

Eye:

Wear goggles, safety glasses or face shield;

Footwear:

Wear suitable shoes

Engineering controls:

Local standards. Use in well ventilated area

Leak & spill procedure:

Vacuum dust deposits. Place in an appropriate container for disposal. Avoid
generating dust during clean-up. Dispose of in accordance with Federal, State and
local regulations in a permitted waste management facility.

NOTE:

To reduce possibility of skin irritation wash work clothes
separately and rinse washer after use

SECTION 8

FIRST AID/PERSONAL PROTECTION/EXPOSURE CONTROL

Eyes:

Do not rub eyes, as fibres may scratch the eye. Immediately flush eyes with large
amounts of water for at least 15 minutes. If irritation persists, seek medical
attention.

Skin:

Wash exposed areas with soap and water. If irritation develops or persists, seek
medical attention. Skin irritation responds well to mild hydrocortisone cream.

Ingestion:

Ingestion of this product is unlikely. If ingested, do not induce vomiting. If an
unusual reaction is noted, contact a physician.

Inhalation:

If the product is inhaled, remove the affected person to fresh air. If irritation
persists, seek medical attention.

Component exposure limits:

a) Fibreglass (65997-17-3)

OSHA PEL: 15 mg/m³ (as total nuisance dust)
5 mg/m³ (as respirable nuisance dust)

ACGIH TLV: 1 f/cc respirable fibres, length >5 µm, aspect ratio ≥ 3:1 as
determined by the membrane filter method at 400 – 450x
magnification [4 mm objective], using phase contrast illumination)
(related to glass wool fibres)

NIOSH REL: 5 mg/m³ as total fibrous glass, or 3f/cc TWA fibres ≤ 3.5 µm in
diameter and ≥ 10 µm in length)

NAIMA: 1 f/cc (HSPP Voluntary Recommended Exposure Limit)

**b) Distillates (petroleum), solvent
dewaxed and/or hydrotreated
heavy paraffinic (64742-65-0 or
64742-54-7)**

OSHA PEL: 500 ppm (as petroleum distillates); 5 mg/m³ (as oil mist, mineral)
ACGIH TLV: 5 mg/m³ (as oil mist, mineral)

NIOSH REL: 350 ppm (as petroleum distillates); 5 mg/m³ (as oil mist, mineral)

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SECTION 9

TOXICOLOGICAL INFORMATION

Carcinogenicity:

A. General product Information: No information available for the product.

B. Component Carcinogenicity:
Fibreglass (65997-17-3):

ACGIH: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
IARC: Group 3 (Not Classifiable As To Carcinogenicity To Humans) (Monograph 81 [2002])

In 2001, following a review of all of the medical and scientific data available, the International Agency on Research on Cancer (IARC), re-classified glass wool insulation fibres from a Group 2B ("Possibly Carcinogenic to Humans") to a Group 3 classification ("Not Classifiable As To Carcinogenicity to Humans"). In issuing this finding, IARC stated that "there is no evidence of increased risks of lung cancer or of mesothelioma from occupational exposures during the manufacture of these materials, and inadequate evidence overall of any cancer risk".

NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)

The NTP classified "Glass Wool, Respirable Size" as "Reasonably Anticipated To Be A Human Carcinogen" in its Seventh Report On Carcinogens (ROC), issued in 1994. Insulation glass wool fibres are under consideration for delisting in the Twelfth Report on Carcinogens, currently under review.

Mutagenicity: No information available for the product.

Teratogenicity: No information available for the product.

Developmental Effects: No information available for the product.

SECTION 10:

ECOLOGICAL INFORMATION

A. General Product Information: No information available for this product.

B. Component Analysis: No information available for the components of this product.

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 Act Amendments of 1990 40 CFR Part 82, Protection of Stratospheric Ozone.

This product is not classified as a hazardous air pollutant in Title III Clean Air Act of 1990.

Fibreglass is hydrophobic; therefore, no adverse environmental effects would be expected if this product were accidentally released in the water or soil. No harm to fish or wildlife would be caused by this product.

Our TC-417 fibre is manufactured by CertainTeed Corporation and meets GREENGUARD Emission Standards. CertainTeed's certification confirms compliance with GREENGUARD Emission Standards, which are based on criteria used by the State of Washington, the U.S. Environmental Protection Agency (EPA), OSHA and the World Health Organization for total particulate and Volatile Organic Compounds (VOC) emissions, including formaldehyde. Additionally, our TC-417 meets the following emission criteria: California Section CA1350 material specification for schools and offices; OSHA Purchase Specification; State of Washington; EPA; and Proposed State of California. It also meets the EPA Recovered Material Guideline for recycled content

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SECTION 11

WASTE DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions

A: General Product Information: Wastes must be tested using methods described in 40 CFR Part 61 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers: No EPA-listed Waste Numbers are being shown for this product's components.

Disposal Instructions: Dispose of waste material according to Federal, State, local and Provincial environmental regulations. See Section 7 for Handling Procedures; see Section 8 for Personal Protective Equipment recommendations.

SECTION 12

TRANSPORTATION INFORMATION

US DOT Information: This product is not regulated as a hazardous material by the United States (DOT) transportation regulations.

National Motor Freight Class (NMFC): 10330S3, Insulation Material – NOI (Not Otherwise Indexed)

International Transport Regulations: This product is not regulated as a hazardous material by Canadian (TDG) transportation regulations.

SECTION 13.

US FEDERAL & STATE REGULATIONS

A: General Product Information: Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are either exempt from listing (i.e. polymers, hydrates) or are listed on the confidential inventory as declared by the supplier.

B: CERCLA None of the components of this product are present at an amount reportable to the National Response Center under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA: 40 CFR 302.4) or to state and local Emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA, Title III, Section 304)

Acute Health: Yes; **Chronic Health:** Yes; **Fire:** No; **Pressure:** No; **Reactive:** No

STATE REGULATIONS

A: General Product Information: Other state regulations may apply. Check individual state requirements.

B: Component Analysis – State: The following components appear on one or more of the following state hazardous substances lists.

Component	CAS #	C	A	M	A	M	N	N	J	P	A	RI
Fiber Glass	65997-17-3	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Distillates (petroleum), solvent dewaxed and/or hydrotreated heavy paraffinic	64742-65-0/ 64742-54-7	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes

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C: California Safe Drinking Water and Toxics Enforcement Act (Proposition 65)

The following statement(s) are provided under the California Safe Drinking Water and Toxics Enforcement Act (Proposition 65)

WARNING! This product contains a chemical known to the State of California to cause cancer

SECTION 14

CANADIAN WHMIS INFORMATION

A: General Product Information: WHMIS Class D2A – Very toxic material.
B: Component Analysis -WHMIS IDL: Fibrous glass and mineral oil are listed in the WHMIS IDL.
WHMIS Classification: WHMIS Class D2A – Very toxic material.

SECTION 15

ADDITIONAL COMMENTS

Other Information:

DISCLAIMER: Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

Acronyms/definitions used in this MSDS:

ACGIH American Conference of Governmental Industrial Hygienists;
CAS # Chemical Abstracts Services Number;
CERCLA Comprehensive Environmental Response, Compensation and Liability Act;
CFR Code of Federal Regulations;
EPA Environmental Protection Agency;
HMIS Hazardous Material Identification System;
HSPH Health and Safety Partnership Program
IARC International Agency for Research on Cancer;
IDL Ingredient Disclosure List;
LFL Lower Flammable Limit;
mg/m³ Milligrams per cubic metre;
NAIMA North American Insulation Manufacturers Association
NFPA National Fire Protection Association;
NIOSH National Institute for Occupational Safety and Health;
NTP National Toxicology Program;
OSHA Occupational Safety and Health Administration;
ppm Parts per million;
PEL Permissible Exposure Limit;
REL Recommended Exposure Limit;
SARA Superfund Amendments and Reauthorization Act;
RCRA Resource Conservation and Recovery Act;
MSDS Number: CT 10093-1
Title III Emergency Planning and Community Right to Know Act;

Section 302-Extremely Hazardous Substances;
Section 313-Toxic Chemicals;
TLV Threshold Limit Value;
TWA Time Weighted Average;
UFL Upper Flammable Limit;
µm Micron;
WHMIS Workplace Hazardous Material Information System. SARA Superfund Amendments and Reauthorization Act;
RCRA Resource Conservation and Recovery Act;
MSDS Number: CT 10093-1
Title III Emergency Planning and Community Right to Know Act;
Section 302-Extremely Hazardous Substances;
Section 313-Toxic Chemicals;
TLV Threshold Limit Value;
TWA Time Weighted Average;
UFL Upper Flammable Limit;
µm Micron;