SAFETY DATA SHEET

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Issue or Revision Date: 2018 January 03

SECTION 1 IDENTIFICATION

Product Name: TC-417 thermal and acoustic fibre/AF90 acoustic fibre

Chemical Name/Family Name: Mixture/fibreglass insulation

Use:

Component of TC-417 & AF90 thermal and acoustic insulation None Assigned

CAS Number:

Manufacturer/Supplier: ThermaCoustic Industries International Limited

> Unit 108, 20119 - 113B Avenue Maple Ridge, BC V2X 0Z1

604 460 1475

Office Hours: 07:00 - 15:00 Monday to Friday

(Except Canadian Statutory Holidays)

604-460-1475 **Emergency Telephone:**

SECTION 2 HAZARD IDENTIFICATION

Component Information/Information

on Non-Hazardous Components

Routes of Exposure

Potential Health Effects

These products are considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is a

controlled product under Canadian WHMIS regulations

Emergency Overview May cause temporary irritation to the upper respiratory system, skin

and eyes; may cause

gastrointestinal irritation if ingested. Inhalation, skin, and eye contact.

Eyes. Contact with the eye may result in temporary irritation. Symptoms may include tearing and redness.

Potential Health Effects Skin. Contact with the skin may be temporarily irritating to some

individuals.

Potential Health Effects Ingestion. Ingestion of this product is unlikely. Contact a physician if

unusual reaction is noted.

Potential Health Effects Inhalation. Inhalation of this product may cause temporary irritation of

the upper respiratory tract.

Medical Conditions Aggravated by

Exposure

Medical conditions that may be aggravated by exposure could include any pre-existing conditions which may be aggravated by mechanical

irritants upon inhalation or skin contact.

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 =

Severe * = Chronic hazard





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SECTION 3	COMPOSITION / INFORMATION ON INGREDIENTS						
CAS#	Component:	Percent:					
65997-17-13	Fibreglass wool	≥ 99%					
64742-54-7	Coating oil	≤ 1%					
SECTION 4	FIRST AID MEASURE	s					
First Aid: Eyes	with large amounts of water for at least 15 m attention.	water for at least 15 minutes. If irritation persists, seek medical attention.					
First Aid: Skin	persists, seek medical	Wash exposed areas with soap and water. If irritation develops or persists, seek medical attention. Skin irritation responds well to mild hydrocortisone cream.					
First Aid: Ingestion		Ingestion of this product is unlikely. If ingested, do not induce vomiting. If an unusual reaction is noted, contact a physician.					
First Aid: Inhalation Component exposure limits: a) Fibreglass (65997-17	irritation persists, seek	If the product is inhaled, remove the affected person to fresh air. If irritation persists, seek medical attention.					
OSHA PEL:	15 mg/m³ (as total nuis						
ACGIH TLV:	5 mg/m³ (as respirable nuisance dust) 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: NAIMA: b) Distillates (petroleur solvent dewaxed and hydrotreated heavy paraffinic 64742-54-7	5 mg/m³ as total fibrou diameter and ≥ 10 μm 1 f/cc (HSPP Voluntar n),	is glass, or 3f/cc TWA fibres ≤ 3.5 μm in					
OSHA PEL: ACGIH TLV: NIOSH REL:	500 ppm (as petroleur 5 mg/m³ (as oil mist, n	n distillates); 5 mg/m³ (as oil mist, mineral) nineral) n distillates); 5 mg/m³ (as oil mist, mineral)					

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SECTION 5	FIRE FIGHTING MEASURES					
General Fire Hazards	See Section 9 for Flammability Properties. Product does not support combustion.					
Hazardous Combustion Products	A non-hazardous mineral oil dust suppressant additive in the product may emit carbon monoxide as a decomposition product.					
Extinguishing Media	Use extinguishing media appropriate for surrounding fire.					
Fire Fighting Equipment/Instructions	Standard fire fighting protective equipment appropriate for surroundin fire may be used.					
NFPA Ratings:	Health: 0 Fire: 0 Reactivity: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe					
SECTION 6	ACCIDENTAL RELEASE MEASURES					
Containment Procedures	Wear appropriate personal protective equipment.					
Clean-Up Procedures	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.					
Evacuation Procedures	Not expected to be an issue.					
SECTION 7	HANDLING AND STORAGE					
When handling and/or applying this product:	 Wear long sleeves and general purpose work gloves (canvas, leather or other); Wear eye protection such as goggles, safety glasses or face shield; When necessary, use a NIOSH-approved respirator with an efficiency of N95 or higher; 					
After handling and/or applying this product:	Wash with soap and warm waterWash work clothes separately and rinse washer after use					
Storage Procedures	 Store these products in a cool, dry, well-ventilated area, unde cover. 					

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SECTION 8

EXPOSURE CONTROL / PERSONAL PROTECTION /

A: Component Exposure Limits Fiber Glass (65997-17-3)

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

ACGIH TLV: 1 f/cc TWA (respirable fibers, length >5 µm, aspect ratio >=3:1, as determined

by the membrane filter method at 400-450x magnification [4 mm objective],

using phasecontrast illumination) (related to glass wool fibers)

NIOSH REL: 5 mg/m₃ as total fibrous glass, or 3 f/cc TWA(fibers <= 3.5 μm in diameter and

>=10 µm in length)

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

Distillates (petroleum), solvent dewaxed and/or hydrotreated heavy paraffinic 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 mg/m₃ (as petroleum distillate); 5 mg/m₃ (as oil mist, mineral)

Engineering Controls Avoid spread of fiber glass dust. Provide adequate general and/or local

exhaust ventilation to maintain worker exposures below exposure

limits.

Personal Protective Equipment:

General

Use appropriate personal protective equipment when handling this

product.

Personal Protective Equipment:

Eyes/Face

Safety glasses with side shields or chemical goggles are

recommended to prevent fibers from

contacting the eyes.

Personal Protective Equipment:

Skin

Wear protective general purpose work gloves (canvas, leather or other

type), long pants and long-sleeved shirts to prevent against skin

contact.

Personal Protective Equipment:

Respiratory

Use appropriate NIOSH-approved respiratory protection, such as a single-use dust/mist respirator (N95) when installing this product. For higher fiber concentrations, a full-face respirators, equipped with high-

efficiency particulate air (HEPA) filters may be necessary.

Personal Protective Equipment:

Other

Use of a hard hat is recommended in attics to prevent against injury from protruding nails overhead. The use of hearing protection is recommended when working in close proximity to insulation blowing

equipment.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White, unbonded glass fibers

Odor: None Physical State: Solid

pH: Not Applicable
Vapor Density: Not Applicable
Boiling Point: Not Applicable
Melting Point: 2200°F/1200°C

Solubility (H2O):
Specific Gravity:
Flash Point:
Upper Flammability

Solubility (H2O):
Small
Glass = 2.5
Not Applicable
Not Applicable

Limit:

Auto Ignition Temp.:Not ApplicableBurning Rate:Not Applicable

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable under normal conditions

Incompatibility: Hydrofluoric acid

Possible Hazardous Reactions: None

Hazardous Decomposition Product: A non-hazardous mineral oil dust suppressant additive in the product

may emit carbon monoxide as a decomposition product.

SECTION 11 TOXICOLOGICAL INFORMATION

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 Any pre-existing conditions which may be aggravated by mechanical

Effect of long-term exposure: Unknown.

Carcinogenicity: Unknown.

HMIS Ratings: Health: 1*; Fire: 0; Physical Hazard: 0

Carcinogenicity:

by exposure:

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

B. Component Carcinogenicity: ACGIH: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans) IARC: Group 3 (Not Classifiable As To Carcinogenicity To

Humans) (Monograph 81 [2002])

irritants upon inhalation or skin contact.

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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 productTeratogenicity:No information available for the productDevelopmental Effects:No information available for the product

SECTION 12 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.

SECTION 13 DISPOSAL CONSIDERATIONS

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 14 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):

International Transport

Regulations:

10330S3, Insulation Material – NOI (Not Otherwise Indexed)

This product is not regulated as a hazardous material by Canadian

(TDG) transportation regulations.

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SECTION 15 REGULATORY INFORMATION

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#	CA	MA	M N N	J P #	1	RI
Fiber Glass	65997-17-3	Yes	No	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

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

CANADIAN WHMIS INFORMATION

Component Analysis -WHMIS IDL:

Component: CAS #: Minimum Concentration:

fibreglass wool not available $\geq 99\%$ Coating oil not available $\leq 1\%$

WHMIS Classification: This <u>not</u> a **WHMIS** controlled product. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. This MSDS contains all information required by said regulations.

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SECTION 16

OTHER INFORMATION

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;

HSPP 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;