CTA Acoustics, Inc.

MATERIAL SAFETY DATA SHEET

Date prepared: Oct. 19, 2004

SECTION 1
CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT(S): ThermaBlend™ Duct Liner

®Trademark of CTA Acoustics, Inc.
SYNONYM: Fiber Blended Product
CHEMICAL FAMILY: Fiber Glass Insulation

RECEIVED
Date: 11/19/04

MANUFACTURER:
CTA Acoustics, Inc.
100 CTA Blvd.
Corbin, KY 40701
Emergency Contacts: (606) 528-8050 (8AM- 5PM M-F)

SECTION 2
COMPOSITION / INFORMATION ON INGREDIENTS

MATERIAL OR CHEMICAL NAME	CAS NUMBER	MAXIMUM WT%	OSHA PEL	ACGIH TLV
Glass Fibers	65997-17-3	<50%	Total Nuisance Dust 15mg/m³ Respirable Nuisance Dust: 5mg/m³	Continuous Filament: 5 mg/m³ Inhaleable Dust, 1 fiber/cc Respirable Fiber
This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, **Not Listed ☒.**				
Fibrous Glass	65997-17-3	<60%	Total Nuisance Dust 15mg/m³ Respirable Nuisance Dust: 5mg/m³	Continuous Filament: 5 mg/m³ Inhaleable Dust, 1 fiber/cc Respirable Fiber
This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, **Not Listed ☒.**				
Natural Fibers	Proprietary	<8%	Total Nuisance Dust: 15mg/m³ Respirable Nuisance Dust: 5 mg/m³	Total Nuisance Dust: 10 mg/m³
This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, **Not Listed ☒.**				
Synthetic Fiber	N/A	<10%	Total Nuisance Dust: 15mg/m³ Respirable Nuisance Dust: 5 mg/m³	None
This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, **Not Listed ☒.**				
Phenolic Resin- phenol novalac phenolic resin, fully cured, containing low hexamine	N/A	<22%	None	None
This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, **Not Listed ☒.**				
Facing – Contains random oriented fibers with an adhesive coating	N/A	<12%	None	None
This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, **Not Listed ☒.**				
Acrylic Coating	N/A	<2%	None	None

This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, **Not Listed** ☒.

Limestone	1317-65-3	Unknown	3mg/m³ TWA	20mg/m³ inhaleable

This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, **Not Listed** ☒.

Urea Extended Phenol Formaldehyde Resin– fully cured	25104-55-6	<10%	N/A	N/A

*TLV and PEL limits are for respirable fibers length <5µm, diameter >3µm, aspect ratio < 5:1

SECTION 3
HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

Primary Routes of Entry: Inhalation, skin and eye contact.

Acute Inhalation: May cause temporary mechanical irritation to upper respiratory tract.

Chronic Inhalation: None known.

Acute Skin Contact and Sensitization: May cause temporary mechanical irritation in certain individuals.

Chronic Skin Contact: None known.

Skin Absorption: None.

Acute Eye Contact: May cause temporary mechanical irritation.

SECTION 3 (Cont.)
HAZARD IDENTIFICATION

Chronic Eye Contact: None known.

Acute Ingestion: Unlikely; contact physician if unusual reaction is noted.

Chronic Ingestion: None known.

Medical Conditions that may be Aggravated: Pre-existing conditions may be aggravated by mechanical irritants upon inhalation or skin contact.

Carcinogenicity:

Ingredient: Material Classified with in the Fibrous glass (respirable size) family, but not inclusive of all members.

IARC: Group 3, not classifiable as to carcinogenicity to humans.

NTP: Listed as 2, reasonably anticipated to be a carcinogen, sufficient evidence from studies in experimental animals.

OSHA: Not listed.

Ingredient: Fibrous glass textile or continuous strand.

IARC: Group 3, not classifiable as to carcinogenicity to humans.

NTP: Not listed.

OSHA: Not listed.

Mutagenicity: None.

Teratogenicity: None.

Toxicological Synergistic Products: None.

SECTION 4
FIRST AID MEASURES

Inhalation: Remove from exposure. Get medical help if irritation persists.

Eye Contact: Flush well with running water for at least 15 minutes. Get medical help if irritation persists.

Skin Contact: Rinse skin with cool water followed by washing with soap and warm water. Get medical help if irritation persists.

Ingestion: Unlikely. Consult physician if unusual reaction is noted.

Fires: Remove to fresh air. Administer oxygen and get medical help.

SECTION 5
FIRE FIGHTING MEASURES

Flash Point ("F") and Method: Does not support combustion.

Flammable Limits: LEL: N/A UEL: N/A

Autoignition Temperature: N/A

Extinguishing Media: Use that which is applicable to surrounding fire.

Special Fire Fighting Procedures: Observe normal fire fighting procedures.

Conditions of Flammability:

Facings on these products may burn. Care should be taken to not leave facing exposed when working close to an open flame.

Unusual Fire and Explosion Hazard, Decomposition Products:

In a fire situation product may emit smoke and toxic fumes containing carbon dioxide, carbon monoxide, sulfur dioxide, and other undetermined compounds.

SECTION 6
ACCIDENTAL RELEASE MEASURES

Spills/Leaks: Vacuum dust deposits. Do not use compressed air for clean up.

Accidental or Unplanned Releases: Sweep area clean. Use vacuum and/or wet clean-up methods.

SECTION 7
HANDLING AND STORAGE

Handling:

When handling and/or applying this insulation:

- Use protective equipment to avoid irritation as described in Section 8.
- Wear eye protection (goggles, safety glasses, or face mask).
- Use a NIOSH-certified disposable or reusable particulate respirator with an efficiency of N95 or higher, such as a 3M Brand #8210, #8511, #8233, or equivalent.

After handling and/or applying this insulation:

- Rinse skin with cool water followed by washing with soap and warm water.
- Wash work clothes separately and rinse washer after use.

Storage:

- Store under cover to protect product. Material should be kept dry.

SECTION 8
EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal Protective Equipment:

Respirators:

When over PEL/TLV, wear an approved respirator such as 3M 8210, N95 or equivalent to protect against respirable fibrous glass. Concentrations of fibers that exceed the recommendations of the mask manufacturer will need a higher level of respiratory protection, such as a half mask respirator with appropriate dust filters.

Work Practices and Engineering Controls:

Avoid spread of fiber glass dust. Provide general and/or local exhaust ventilation to control airborne dust levels below exposure limits.

Product Package Label

WARNING

In 2001, the International Agency for Research on Cancer (IARC) reclassified fibrous glass as Group 3, not classifiable as to carcinogenicity in humans.

Contains fibrous glass which, under the National Toxicology Program, is a possible cause of cancer if inhaled.

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

This fibrous glass may cause temporary mechanical irritation to skin, eyes, throat, and upper respiratory tract.

Product contains cured binder with formaldehyde and phenol.

SECTION 9
PHYSICAL / CHEMICAL PROPERTIES

Melting Point	>1300° F(Glass Fiber)
Boiling Point	>2,550° F (Glass Fiber)
pH	N/A
Specific Gravity (H_20=1)	1.5 – 1.8
Viscosity (Brookfield)	N/A
Vapor Pressure	N/A
Vapor Density (Air=1)	N/A
Evaporation Rate (Butyl acetate = 1)	N/A
Soluble in water	Slight
Appearance and Odor	Yellow, Brown, or Black Solid Fibrous Mat
Volatile Content	N/A
Volatile Organic Content	N/A
Solids	Approximately 100% (less absorbed moisture)

SECTION 10
CHEMICAL STABILITY AND REACTIVITY INFORMATION

Stability: Material is stable.

Corrosivity: None.

Incompatibility: Hydrofluoric Acid.

Reactivity: None.

Reactivity with water: None.

Explosion: Product is not sensitive to mechanical impact or static discharge.

SECTION 11
TOXILOGICAL INFORMATION

Fibrous Glass: The 2002 Monograph issued by the International Agency for Research on Cancer (IARC) removed fibrous glass from its' list of possible carcinogens (Group 2B). It is now classified as Group 3, not classifiable as to human carcinogenicity.

OSHA and other U.S. government agencies still require that a warning label be placed on this product. This warning identifies a possible hazard while not identifying the degree of risk. OSHA regulations do not require respiratory protection as long as the exposure to fibrous glass does not exceed 1 fiber/cubic centimeter (f/cc) TWA (8 hour time weighted average). Fibrous glass exposure in the home, commercial buildings, and manufacturing facilities is generally found to be less than 1 f/cc. Installers and fabricators should be aware of their exposure levels and take appropriate actions if needed per recommended work practices. Guidance on typical fiber exposures for various applications can be obtained from the North American Insulation Manufacturers Association, www.NAIMA.org.

SECTION 12
ECOLOGICAL INFORMATION

These products are not manufactured with, nor do they contain, any Class I Ozone depleting chemicals as defined by the 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.

Binder-coated fiber glass 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
WASTE DISPOSAL CONSIDERATIONS

Scrap material should be disposed of in a sanitary landfill in accordance with federal, state, and local regulations. Waste material is not considered hazardous as defined by RCRA (40 CFR 261).

SECTION 14
TRANSPORTATION INFORMATION

ational Motor Freight Classification (NMFC): 10330053, Insulation Material – NOI (Not Otherwise Indexed).

SECTION 15
REGULATORY INFORMATION

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST – None.
SARA 312 HAZARD CATEGORY – None.
SARA 313 TOXIC CHEMICALS LIST – None.
CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) – None.
RCRA (Resource Conservation and Recovery Act) Hazardous Waste – None.
CWA (Clean Water Act) Listed Substances – None known at this time.
CAAA 1990 (Clean Air Act Amendments 1990) –
- This product is not subject to the CAA Risk Management Planning Requirements for toxic or flammable chemicals.

OSHA PSM (OSHA Process Safety Management Plan) –
- This product is not subject to the OSHA PSM planning requirements.

FDA (Food and Drug Administration) – None known at this time.
TSCA (Toxic Substances Control Act) Applicability
- All components are listed on the TSCA Inventory.

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) –
- This product contains materials registered as a pesticide EPA Reg. No. 1448-17.

SECTION 16
OTHER INFORMATION

	Health	Fire	Reactivity	Degree of Hazard
NFPA Rating:	0	0	0	0 = Minimal Hazard
HMIS Rating:	1	0	0	1 = Slight Hazard
				2 = Moderate Hazard
				3 = Serious Hazard
				4 = Severe Hazard

KEEP OUT OF REACH OF CHILDREN
THIS PRODUCT CONTAINS NO ASBESTOS
Acronyms/definitions used in this MSDS:

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS No.	Chemical Abstracts Service Number
EPA:	Environmental Protection Agency
f/cc:	Fibers per cubic centimeter
HMIS:	Hazardous Material Identification System
HSPP:	Health & Safety Partnership Program between OSHA and the North American Insulation Manufacturer's Association (NAIMA)
IARC:	International Agency for Research on Cancer
LC_{50}:	The air concentration of a substance, which administered over a specified time period in an animal assay, is expected to cause the death of 50% of a defined animal population.
LEL:	Lower Explosive Limit
Mg/m^3:	Milligrams per cubic meter
N/A	Not Applicable
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NMFC:	National Motor Freight Classification
NOI:	Not Otherwise Indexed
NTP:	National Toxicological Program
N95:	A particulate filter respirator certified for at least 95% filter efficiency. For use in atmospheres containing solid or particulate hazards that do not contain oil.

N100:	A particulate filter respirator certified for 99.97% filter efficiency. For use in atmospheres containing solid or particulate hazards that do not contain oil.
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit
RCRA:	Resource Conservation and Recovery Act
SARA:	Superfund Amendments and Reauthorization Act
Title III:	Emergency Planning and Community Right to Know Act Section 302 – Extremely Hazardous Substances Section 313 – Toxic Chemicals
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act (USA)
TWA:	Time Weighted Average
UEL:	Upper Explosive Limit

Respirable Nuisance Dust:	The respirable fraction of suspended airborne particulates.
Respirable Fibers (ACGIII):	Suspended airborne particulates with lengths greater than 5 microns and a 3:1 length to width aspect ratio. Results given as f/cc.
Respirable Fibers (HSPP):	Suspended airborne particulates with diameters of 3 micrometers or less, lengths of 5 micrometers or more and 5:1 length-to-width aspect ratio (NIOSH 7400 method, B rules). Results given as f/cc.
Respirable Fibers (NIOSH):	Suspended airborne particulates with diameters of 3.5 microns or less and lengths of 10 microns or more. Results given as f/cc.
Total Nuisance Dust:	Suspended airborne particles of "nuisance" dusts including those of non-respirable size.
Total Glass Dust:	Suspended airborne particles of dust composed of glass only, including those of non-respirable size.

This MSDS was prepared by:
Tetra Tech, Inc.,
Lexington, Kentucky
(859) 223-8000

MSDS information developed from ingredient MSDSs provided to Tetra Tech by CTA Acoustics, Inc.

Date Prepared: *October 13, 2004*
Revision: *Revision 3*

The information contained in this MSDS was developed from data provided to Tetra Tech, Inc. by CTA Acoustics, Inc. EHS department effective with the date of this new MSDS. The data included in this MSDS includes the current mixture weight percentages of raw materials in the CTA 101 Edge Coating and the Material Safety Data Sheets for each of the materials in the CTA Edge Coating 101. CTA Acoustics, Inc. believes the information contained in this MSDS to be accurate. This MSDS was prepared from data supplied to CTA by suppliers and that CTA does not warrant or guarantee the accuracy of your suppliers MSDS statements