Material Safety Data Sheet (MSDS) – CoreBOO™ AIR MESH Panels

IDENTITY *(As Used on Label and List)*
CoreBOO™ component of AIR MESH Panels

Section I

Manufacturer's Name: US OFFICE: Sustainable Materials LLC	Emergency Telephone Number: (720) 449-3063
Address *(Number, Street, City, State, and ZIP Code)* 5403 Western Ave Unit C Boulder, CO 80301	Telephone Number for Information (720) 449-3063
	Date Prepared August 8, 2023

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	Amount in product	OSHA PEL	ACGIH TLV	Other Limits Recommended
Bamboo fibers (airborne dust when milled)	97-98%	15 mg/m3 for total dust; 5 mg/m3 respirable fraction of wood dust[1]	1 mg/m(3) – for 8-hour workday[2]	NIOSH REL: 1 mg/m(3) – for 10-hour workday[3]
Phenol Formaldehyde Resins	.0127 ppm	5 ppm [4]	5 ppm, 19 mg/m3 TWA (Skin) [5]	NIOSH REL**:** 5 ppm TWA (Skin), 15.6 ppm Ceiling (15 min) (Skin) [6]
Polymerized Polyurethane (only found on the "finished" material)	Not determined	Not Listed	Not Listed	Not applicable

1-3 OCCUPATIONAL SAFETY AND HEALTH GUIDELINE FOR WOOD DUST, ALL SOFT AND HARDWOODS, EXCEPT WESTERN RED CEDAR

4-6 Parts of vapor or gas per million parts of contaminated air by volume at 25 [deg]C and 760 torr. (**Gases, vapors, fumes, dusts, and mists. - 1926.55 App).**

Section III - Physical/Chemical Characteristics [7]

Boiling Point	359 F	Specific Gravity (H_2O = 1)	0.815
Vapor Pressure (mm Hg)	0.36mm	Melting Point	106° F
Vapor Density (AIR = 1)	1.043	Evaporation Rate (Butyl Acetate = 1)	Not Applicable
Solubility in Water Soluble in water, alcohol, and ether			
Appearance and Odor colorless to pink solid or thick liquid with a characteristic, sweet, tarry odor			

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) 50°C (122°F) of aqueous solution (closed cup method), though not applicable in state supplied to end-user.	Flammable Limits Explosive Limits: Gas 7.0-73% by volume in air	LEL Not Applicable	UEL Not Applicable
Extinguishing Media Water, carbon dioxide, sand or dry chemical			
Special Fire Fighting Procedures None			
Unusual Fire and Explosion Hazards None			

Section V - Reactivity Data

Stability Yes	Conditions to Avoid Not applicable to product in its' supplied form.
Incompatibility *(Materials to Avoid)* Not applicable	
Hazardous Decomposition or Byproducts By-products emitted by decomposition include carbon monoxide, carbon dioxide, aliphatic aldehydes, polycyclic aromatic hydrocarbons, rosin acids, and terpenes.	

[7] **FORMALDEHYDE IN WORKPLACE ATMOSPHERES (3M MODEL 3721 MONITOR)**

Section VI - Health Hazard Data

1) Bamboo/Wood Dust:

Both the skin and respiratory system can become sensitized to wood dust. When a worker becomes sensitized to wood dust, he or she can suffer a severe allergic reaction (such as asthma) after repeated exposure or exposure to lower concentrations of the dust.

Other common symptoms associated with wood dust exposure include eye irritation, nasal dryness and obstruction, prolonged colds, and frequent headaches.

Certain species of hardwood - such as oak, mahogany, beech, walnut, birch, elm, and ash - have been reported to cause nasal cancer in woodworkers. This is particularly true when exposures are high. The American Conference of Governmental Industrial Hygienists (ACGIH) recognizes wood dust as a "confirmed" human carcinogen,3 and recommends a limit of 1 milligram per cubic meter (mg/m 3) for hardwoods and 5 mg/m 3 for softwoods. Currently, OSHA regulates wood dust as a nuisance dust; however, OSHA strongly encourages employers to keep exposures to a minimum and to adopt the ACGIH levels. The maximum permissible exposure for nuisance dust is 15 mg/m 3, total dust (5 mg/m 3, respirable fraction).

2) Formaldehyde:

Formaldehyde is considered a strong irritant and potent sensitizer. Inhalation of large amount of HCHO can cause severe irritation of the upper respiratory tract and death. Data from human exposures indicate that exposure to large concentrations of HCHO gas may lead to pulmonary edema. Even HCHO gas present in the workroom at concentrations of 1 to 11 ppm can cause eye, nose, and throat irritation (5.11.). Formaldehyde has the potential to cause cancer in humans (5.12.).

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
Mouth, Skin, eyes	Yes	Yes	Yes

Health Hazards *(Acute and Chronic)*
Formaldehyde is considered a strong irritant and potent sensitizer. Inhalation of large amount of HCHO can cause severe irritation of the upper respiratory tract and death. Data from human exposures indicate that exposure to large concentrations of HCHO gas may lead to pulmonary edema. Even HCHO gas present in the workroom at concentrations of 1 to 11 ppm can cause eye, nose, and throat irritation.

Carcinogenicity:
Formaldehyde has the potential to cause cancer in humans. Avoid high concentration and prolonged exposure.

Signs and Symptoms of Exposure

Concentration	Symptoms
0.5 to 2 ppm	eyes, nose and throat irritation
3 to 5 ppm	tearing of the eyes
10 to 20 ppm	difficult breathing, nose and throat burning, cough, heavy tearing of the eyes
25 to 30 ppm	severe respiratory tract injury
100 ppm	immediately dangerous to life and health (IDLH)

Medical Conditions
Generally Aggravated by Exposure.

Emergency and First Aid Procedures
Seek medical attention if above referenced symptoms occur.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Not applicable to product in its' supplied form.

Waste Disposal Method
No special disposal methods are required.

Precautions to Be taken in Handling and Storing
No special precautions are required for products in their supplied form. Keep material is a cool, dry, and ventilated place. Clean site of airborne dust as it is created to minimize airborne dust and contaminant issues.

Section VIII - Control Measures

Respiratory Protection *(Specify Type)*
No special handling precautions are required for products in their supplied form, though use of an acceptable NIOSH respirator is recommended to avoid inhalation of excess dust particles.

Ventilation
When milling, dust containment and adequate ventilation are requested.

Eye Protection
No special handling precautions are required for products in their supplied form, though use of protective eye protection is recommended when milling (cutting, shaping, etc.) to avoid discomfort and the potential of airborne dust to affect sight.

Other Protective Clothing or Equipment
No special protective clothing or equipment is required for products in their supplied form.

Section IX – Toxicology Information

Not available for products in their supplied form

Section X - Control Measures

Not available for products in their supplied form

Section XI – Ecological Considerations

Not applicable.

Section XII – Disposal Considerations

Follow applicable local, state, and federal guidelines for disposal.

Section XIII –Transportation Considerations

Not regulated as a hazardous material by the United States Department of Transportation in its supplied state.

Section XIV –Additional information

IMPORTANT: The information and data included in this report is believed accurate and has been compiled through information and testing created for the manufacturing facility producing said material, as well as through conversations with OSHA, as well as through OSHA's detailed technical manuals, and information provided by other technical experts. Buyer assumes all risks of use, storage and handling of the product in compliance with applicable local, state, and federal regulations. **NOTE: Sustainable Materials makes no warranty, of any kind, express or implied, concerning the accuracy and completeness of the information contained within, and will not be liable for claims relating to any party's reliance on this information.**