



ISO 9001:2000 Registered

MATERIAL SAFETY DATA SHEET

Thermo-Lite Board® Core, Versatile, Tough, Supreme

Revision #: 6
Last Revision: 04/06/09

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Thermo-Lite Board®
SYNONYMS: Fiber-Reinforced Polyurethane Products
MANUFACTURER: SpaceAge Synthetics, Inc.
ADDRESS: 1402 39th Street NW, Fargo, North Dakota 58102 U.S.A.
PHONE: (701)-277-5631
FAX PHONE: (701)-277-5689
PRODUCT USE: Used in the transportation, marine, and building industry for endless coring applications that require a water resistant, lightweight, high strength material.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT 1:

Polymerized polyurethane rigid closed-cell foam

CAS NO.	% WT
Proprietary	60-88

INGREDIENT 2:

Fiberglass Continuous Filament or/and Continuous Roving

CAS NO.	% WT
65997-17-3	12-40

mg/m³

OSHA PEL-TWA:	15 mg/m ³ Total Dust 5 mg/m ³ Respirable Dust
ACGIH TLV-TWA:	10 mg/m ³ Total Dust

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Stable under normal conditions, but if cutting, sanding, or machining this product it may generate dust. Dust may cause upper respiratory tract, lung, eye, nasal, and skin irritation.

ROUTES OF ENTRY: skin, eye, inhalation, and ingestion

POTENTIAL HEALTH EFFECTS

EYES: Dust can cause short term mechanical eye irritation.

SKIN: Contact with the board or dust may produce itching and temporary irritation.

INGESTION: Under normal conditions this does not apply. May result in obstruction and temporary irritation of the digestive tract.

INHALATION: Cutting, sanding, or machining of this product may generate fiber and polyurethane dust which can cause short term upper respiratory tract, lung, eye, nasal, and skin irritation.

CHRONIC HEALTH HAZARDS: In a repeated dose inhalation study, pulmonary lesions and two cancers were reported among a small number of rats exposed to airborne concentrations of 3.6 and 20 mg/m³ polyurethane foam dust. A later study using larger numbers of animals did not show any effects, other than inflammation, at concentrations as high as 20 mg/m³. The significance of the results of the earlier study with respect to human exposure is unknown.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Respiratory or skin conditions that are aggravated by mechanical irritants may be at an increased risk for worsening from exposure to this product, especially from the dust created by this product.

SECTION 4: FIRST AID MEASURES

EYES: Remove contact lenses. Flush eyes with large amounts of running water for 15 minutes. If irritation persists, get medical attention immediately.

SKIN: Wash affected areas gently with mild soap and water. To avoid further irritation, avoid rubbing or scratching, this may force fibers into skin. If irritation persists, contact physician. Always remove and launder contaminated clothing before reuse.

INGESTION: Ingestion of this product is unlikely. If it does occur it may result in obstruction get medical attention immediately.

INHALATION: Remove to fresh air. Seek medical attention if irritation persists.

Note to Physicians: Preexisting disorders of the following organs or organ systems may be aggravated by exposure to this material: skin, lung.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: N/A (**% BY VOLUME**) **LOWER:** N/A **FLASH POINT:** N/A

AUTOIGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: Carbon Dioxide or Dry Chemical extinguishing media.

SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters must be equipped with self-contained breathing apparatus and turnout gear. Upon ignition, a fire could produce intense heat, dense smoke, and irritating or toxic gases.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: May produce CO, CO₂, HCN, ketones, ethers, and esters.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Not applicable for product in purchased form. Pick up large pieces. To prevent obstruction, do not wash down drain. Sweep or vacuum material into a waste container for disposal. If needed, use water spray to wet down and minimize dust generation. Wear approved respirator, if necessary.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: No special handling procedures required for this material. In storage it should be kept away from excessive temperatures.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Provide local exhaust as necessary to meet OSHA requirements for dust exposure. Use wet methods, if appropriate, to reduce generation of dust.

RESPIRATORY PROTECTION: Wear OSHA approved respirator when permissible exposure limit to dust may be exceeded.

EYE PROTECTION: Recommend eye goggles or safety glasses for nuisance dust.

SKIN PROTECTION: Protective gloves or barrier creams may be used to reduce skin contact and irritation

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Loose fitting long sleeved shirt that covers to the base of the neck and long pants are recommended to reduce skin contact and irritation.

WORK HYGIENE PRACTICES: Remove product dust using vacuum equipment (never used compressed air). Always wash work clothes separately from other clothes. Wipe out the washer or sink to prevent loose dust and glass fibers from getting on other clothes. Keep the work area clean of dusts released during processing. Use vacuum equipment to clean up dust from processing. Avoid dry sweeping or using compressed air as these techniques re-suspend dust into the air. Have access to eye wash stations.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Rigid cellular gray colored foam board

ODOR: No odor

PHYSICAL STATE: Solid

BOILING POINT: N/A

MELTING POINT: N/A

FREEZING POINT: N/A

VAPOR PRESSURE (mmHg): N/A

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H₂O = 1): N/A

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: Insoluble

VISCOSITY: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID (STABILITY): Reaction with a strong acid. Excessive heat and ignition sources.

INCOMPATIBILITY (MATERIAL TO AVOID): None

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: CO, CO₂, HCN, ketones, ethers, and esters.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Polyurethane: As a solid product no toxicity is known. The accidental exposure to pyrolysis products caused from burning rigid polyurethane has caused respiratory irritation and fever and constrictive pulmonary disease. Mice experimentally exposed to smoke from polyurethane showed extensive changes in the lung surfactant metabolism.

Fiberglass Continuous Filament/Woven Roven: In June, 1987, IARC categorized fiberglass continuous filaments as not classifiable with respect to human carcinogenicity. The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify fiberglass continuous filament as a possible, probable or confirmed cancer causing material. Continuous filament fibers are not considered respirable due to their large diameter

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: This material is an inorganic material, and therefore, is not biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: This product is not considered hazardous waste under Federal Hazardous Waste Regulations. Please be advised, however, state and local requirements for waste disposal may be different from federal regulations. Dispose of as inert solid in landfill or by other procedures in accordance with local, state, federal or provincial regulations.

RCRA HAZARD CLASS: non-hazardous waste

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Class #: 60

NMFC #: 156300SUB6

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): Each ingredient is on the Inventory

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES: Non-hazardous

313 REPORTABLE INGREDIENTS: Not Listed

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: HMIS- Reactivity-0 Health-1, Flammability-1, Special-None

DISCLAIMER: The information herein is given in good faith, but no warranty, expressed or implied is made. This MSDS is issued for the sole purpose of using the product as presented. Since the use of this information and the condition of use of this product are not within our control, it is the users obligation to determine the conditions of safe use of this product.