OX Engineered Products LLC, Constantine, MI 700 Centreville Road Constantine, MI 49042 800-345-8881 Prepared 9/20/2018



SECTION 1IDENTIFICATIONProduct Name:Thermo-ply, Interior Board, Energy BraceType of Product:Construction materialThis product is not a hazardous chemical as defined by the Occupational Safety and Health Administration
(OSHA), 29 CFR 1910.1200 as this product meets the definition of an article and is exempted from the SDS
requirement as defined by Section 1.3.2.1.1 of the Globally Harmonized System (GHS), and Section 3 of the
Canadian Hazardous Products Act. Therefore, the information provided in this Safety Data Sheet (SDS) is for
informational purposes only and does not necessarily reflect warning and precautionary statements indicated
in the product's packaging or container label.

SECTION 2	HAZARD(S) IDENTIFICATION
Classifications:	None
Pictograms:	None Required
Signal Word:	None Required
Hazard Statements:	None Required
Precautionary	Solid or dust may cause irritation or corneal injury due to mechanical action. Safety
Statements:	glasses are recommended to be worn for fabrication operations. If in the eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical attention.
	Fabrication methods which involve cutting into this product may release the blowing agent(s) remaining in the cells. Provide adequate ventilation to ensure airborne concentrations of the agents are below exposure limits. This board is combustible and should not be exposed to flame or other ignition sources.

SECTION 3COMPOSITION/INFORMATION ON INGREDIENTSComponents of construction: Paper, polymer and glue. Quantities of listed compounds contained in this
product are not reportable under the "Article" exemption, since they do not release or otherwise result in
exposure of a hazardous chemical under normal conditions of use.

SECTION 4

FIRST AID MEASURES

INHALATION: Repeated exposures to dusts of this material are not anticipated to result in systemic toxicity or permanent lung injury; however, excessive exposures may cause less severe respiratory effects. If excessive inhalation of dust occurs, remove to fresh air. Dust in throat and nasal passages should clear spontaneously. Get prompt medical attention if breathing remains difficult or if irritation persists.

EYES: If dusts generated from fabrication operations get into the eyes, immediately flush eye(s) with plenty of clean potable water for at least 15 minutes while holding eyelids open. Beyond flushing, do not attempt to remove material from the eye(s). Get medical attention if irritation or pain persist or develop later.

SKIN: None expected during normal handling. Mechanical injury only. Skin absorption is unlikely due to this product being an article.

INGESTION: Very low toxicity if swallowed. May cause choking if swallowed. May cause gastrointestinal blockage if swallowed. Do not give laxatives. Do not induce vomiting unless directed by medical personnel

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SECTION 5 FIRE-FIGHTING MEASURES

EXTINGUISHING AGENT: Water spray, carbon dioxide. and dry chemical.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May release hazardous vapors during a fire.

SPECIAL FIRE FIGHTING PROCEDURES: Wear a National Institute for Occupational Safety and Health (NIOSH) approved positive pressure Self-Contained Breathing Apparatus (SCBA) and fully protective clothing (such as turnout gear) as necessary.

HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. In smoldering or flaming conditions, carbon monoxide, carbon dioxide, and carbon are generated.

SECTION 6

ACCIDENTAL RELEASE MEASURES

If board is broken, crushed, or similar, clean up and contain. Prevent debris from entering storm water drains, sewers, etc.

SECTION 7

HANDLING AND STORAGE

General Handling: This material is combustible and should not be exposed to flame or other ignition sources. No smoking, open flames, or sources of ignition in handling and storage area(s). Fabrication methods which involve cutting into this product may release the blowing agent(s) remaining in the cells. Good housekeeping and controlling of dusts are recommended for safe handling.

SECTION 8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	OSHA PEL	ACGIH TLV-TWA/TLV-STEL		
Aluminum metal and insoluble compounds	15 mg/m ³	1 mg/m ³		
Continuous filament glass fiber	(as particulates – 15 mg/m ³)	5 mg/m ³		
Isopentane	None established	None established		
Cyclopentane	None established	600 ppm		
2,2-Dimethylbutane (hexane isomers)	500 ppm	500 ppm/1,000 ppm		
Sulfamic Acid	None established	None established		
mg/m³ milligrams per cubic meter of air volume.ppmparts per millionACGIHAmerican Conference of Governmental Industrial HygienistsOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitSTELShort Term Exposure LimitTLVThreshold Limit Value				

Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

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SECTION 8

EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: If dust is generated indoors and exceeds its PEL, use local exhaust ventilation.

RESPIRATORY PROTECTION: It is good practice to conduct personal monitoring to determine a worker's potential exposure to airborne concentrations of respirable and/or total dust during handling and use of this product, including activities such as fabrication which generate dust. If concentrations are below applicable exposure limits, respiratory protection is not required. If concentrations exceed the applicable exposure limits and while engineering controls are being implemented, use a NIOSH approved air-purifying respirator equipped with the appropriate filter in accordance with an employer/company-specific Respiratory Protection Program.

EYE AND FACE PROTECTION: Eye protection should not be necessary when handling the board. However, safety glasses with side shields should be worn as minimum protection if fabrication processes are being performed. Dust goggles are recommended to be worn when excessively (visible) dusty conditions are present or anticipated. There is a potential for severe eye irritation if exposed to excessive concentrations of dust for those using contact lenses. An eye wash station should be immediately available at the work area.

SKIN AND FOOT PROTECTION: No precautions necessary.

HAND: Use gloves to protect from mechanical injury as necessary.

PERSONAL HYGIENE: Wash dust-exposed hands with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Avoid breathing dust.

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
Appearance:	Tan Board (an Article as defined by OSHA)
Odor and Odor Threshold:	Mild
pH:	Not applicable
Melting Point/Freezing Point:	Not applicable
Boiling Point:	Not applicable
Flash Point:	Not applicable
Flammability/Explosive Limits:	Not applicable
Autoignition Temperature:	490°C (914°F) ASTM D1929
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Relative Density (water = 1):	0.25 (estimated)

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Prepared 9/20/201

SECTION 10 STABILITY

STABILITY: Stable under ambient and anticipated storage and handling conditions.

INCOMPATIBILITY (MATERIALS TO AVOID): None known

CONDITIONS TO AVOID: Avoid temperatures above 150°C (302°F). Exposure to elevated temperatures can cause product to decompose. Avoid direct sunlight.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products will depend on temperature, air supply, and presence of other materials. Toxic gases may be released during decomposition.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

PRIMARY ROUTES OF EXPOSURE: Inhalation of dusts. Repeated exposures to dusts of this material are not anticipated to result in systemic toxicity or permanent lung injury; however excessive exposures may cause less severe respiratory effects. Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

EYE CONTACT: Fabrication processes may release airborne dust which may irritate eyes.

SKIN CONTACT: Direct contact may cause irritation by mechanical abrasion.

SKIN ABSORPTION: Not known to be a significant route of exposure.

INGESTION: Very low toxicity if swallowed. May cause choking if swallowed.

ECOLOGICAL INFORMATION

No bioconcentration of the polymeric component is expected. If spilled in the soil, the material is expected to remain in the soil. In the aquatic environment, material is expected to float.

No appreciable biodegradation is expected.

Not expected to be acutely toxic to aquatic organisms.

SECTION 13

SECTION 12

DISPOSAL CONSIDERATIONS

Dispose of waste materials only in accordance with applicable federal, state, and local regulations. As a supplier of this board, OX Paperboard has no control over the management practices or manufacturing processes of parties handling or using this material. The information presented in this SDS pertains ONLY to the product (an article as defined by OSHA) as shipped in its intended condition. For unused and uncontaminated boards, the preferred options include sending to a licensed, permitted landfill, incinerator, or other thermal destruction device.

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SECTION 14	TRANSPORT INFORMATION
U.S. Department of	Not regulated
Transportation (USDOT):	
Transportation of	Not regulated
Dangerous Goods (TDG):	
IATA Cargo Transport:	Not regulated
IATA Passenger Transport:	Not regulated
IMDG-Code:	Not regulated

SECTION 15	IDENTIFICATION
CERCLA:	Not regulated
TSCA Status:	Not regulated
DSL Status:	No substances are specified on any list. No control measures are imposed to any substance contained in this board.
SARA 313:	This product contains Aluminum dust, CAS 7429-90-5 less than 5%, which is subject to the reporting requirements.
PENN RTK:	U.S. Pennsylvania Worker and Community Right-to-Know Law (34 PA Code Chap. 301-323). This product contains aluminum, CAS 7429-90-5, which is included in the Hazardous Substances List (Chapter 323) but not on the Special Hazardous Substances list (Chapter 323.2).
California Prop 65:	WARNING: This product contains a chemical(s) (Sulfamic Acid CAS 5329-14-6) known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16

OTHER INFORMATION

DISCLAIMER:

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to ensure proper use of these materials and the safety and health of employees. The data in this SDS was prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws, standards, and regulations applicable to the safe handling and use of these products and to determine the suitability of the product for its intended use.