

MATERIAL SAFETY DATA SHEET

BALLY REFRIGERATED BOXES, INC. - (919) 240 - 2829

IDENTIFICATION

- A. Product Name: Bally Isocyanurate Foam Insulation
B. Technical Name: Foamed Polyurethane or Polyisocyanurate
C. Formula: Proprietary

II. INGREDIENTS

- A. Polymerized polyurethane 50%
B. 1, 1-Dichloro-1-fluoroethane (CAS No. 1717-00-8) 50%

III. PHYSICAL DATA

- A. Appearance: Rigid cellular plastic boards, sheets and blocks
B. Odor: None
C. Density: 1.6 - 4.0 lbs./cu. ft.
D. Solubility in water: Not applicable

IV. FIRE AND EXPLOSION DATA

- A. Auto-ignition temperature: 600° - 800°F (315° - 427°C)
B. Extinguishing media: Water, Carbon Dioxide, Foam or Dry Chemicals
C. Special Fire-Fighting Procedures: Full emergency equipment with self-contained breathing apparatus should be worn by fire fighters

V. PHYSICAL HAZARDS

- A. Stability (conditions to avoid): Stable
B. Incompatibility (specific material to avoid): None known
C. Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, possible traces of hydrogen cyanide, halogen acids and nitrogen oxides under fire conditions
D. Hazardous polymerization: May occur if exposed to ignition sources of product combustion

HEALTH HAZARDS

- A. Eye: Solid or dust may cause irritation or corneal injury due to mechanical action.
B. Skin contact: Essentially nonirritating to the skin. Mechanical injury only.
C. Skin absorption: Skin absorption unlikely due to physical properties.
D. Ingestion: Ingestion is unlikely due to physical state. Physical injury only. May cause choking if swallowed.
E. Inhalation: Dust may cause irritation to upper respiratory tract. Vapor/fumes generated in thermal operation such as hot-wire cutting may cause irritation unless area is adequately ventilated.
F. Systemic & other effects: Repeated excessive exposures to dusts may cause respiratory irritation and possible other respiratory effects.

VI. FIRST AID

- A. Eye: Irrigate immediately with water for at least 5 minutes. Mechanical effects only.
B. Skin: Wash off with flowing water or shower.
C. Ingestion: No adverse effects anticipated.
D. Inhalation: Remove to fresh air if effects occur. Consult a physician.

VII. HANDLING PRECAUTIONS

- A. Exposure guideline(s): None established. For particulates which have no specific guidelines, the ACGIH TLV is 10mg/m³ and the OSHA PEL is 15mg/m³ respirable.
B. Ventilation: Control airborne concentrations below the exposure guideline. Use local exhaust ventilation for dusty operation or when hot-wire cutting.
C. Respiratory protection: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air purifying respirator. In dusty atmospheres, use an approved dust respirator.
D. Skin protection: No skin protection is normally required.
E. Eye protection: Use safety goggles. If there is a potential for exposure to particles which could cause mechanical injury to the eye wear chemical goggles.

IX. ADDITIONAL INFORMATION

A. Precautions to be taken in handling & storage

1. Store foam with adequate aiseways to permit access to all areas.
2. Protect indoor foam storage with fusible sprinklers when possible.
3. Smoking, open flame or other ignition sources should not be allowed in foam storage areas.
4. All "Hot Work" (welding, cutting, etc.) should be completed prior to foam installation. If "Hot Work" must be done after the foam has been installed, the "Hot Work" trade must be warned.
 - a. Remove foam from immediate work area a sufficient distance that heat transmitted from the torch or through the metal will not ignite the foam.
 - b. Remove all combustible material from vicinity of and immediately below work area.
 - c. Post a fire watcher equipped with a fire extinguisher during and for 30 minutes after hot operation.
5. Foam used as wall or ceiling insulation must be covered as soon as practicable with a fire resistive thermal barrier having at least a 15 minute fire finish rating. If covering is not immediately possible or practicable, post signs that a fire hazard exists because of exposed foam.
6. Hot wire cutting of foam should be done under adequate ventilation to remove fumes and gases developed.
7. Do not install foam in any flue-like configuration.

B. Environmental and disposal information

1. Do not allow dust or scrap to accumulate. Keep work areas clean and orderly.
 2. Scrap disposal should be done according to good industrial practice and environmental protection regulations. Incinerate or bury in an approved landfill according to local, state and federal regulations.
- C. For more detailed information in precautions for the proper handling and storage of polyisocyanurate foam, contact the sales department, Elliott Company of Indianapolis Inc. Indianapolis, Indiana.

X. REGULATORY INFORMATION (not meant to be all-inclusive)

Notice: The information herein is presented in good faith and believed to be accurate as of the date shown. However, no warranty, expressed or implied is given. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to insure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

- A. U.S. Regulations: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 Code of Federal Regulations (CFR), Part 372,

CHEMICAL NAME	CAS NUMBER	AMOUNT
1,1-Dichloro-1-fluoroethane	1717-00-6	5 - 15%

- B. SARA Hazard Category: This product has been reviewed according to the Environmental Protection Agency (EPA) "Hazard Categories" promulgated under Sections 311 and 312 of Title III of SARA and is considered under applicable definitions, not to have any hazard category.