

# MATERIAL SAFETY DATA SHEET



**Building Products**  
**A Tenneco Packaging Business**

## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Astro-Foil® and Astro-E® Reflective Insulation**

SUPPLIER: Tenneco Building Products  
A Tenneco Packaging Business  
2907 Log Cabin Drive  
Smyrna, Georgia 30080-7013

CONTACTS: For additional product and/or MSDS information, please contact your Tenneco Building Products sales representative or customer service representative. (1-800 227-7339)

## 2. COMPOSITION / INGREDIENTS INFORMATION

INGREDIENTS: Polyethylene, metal foil, anti-static agent, colorant, fire retardant (contains antimony trioxide), adhesive and cohesive agents.

Some specific chemical identities, withheld as trade secrets, will be disclosed to appropriate health professionals, per 29 CFR 1910.1200(c).

## 3. HAZARDS IDENTIFICATION

U.S. OSHA HAZARD COMMUNICATION: Product assessed in accordance with OSHA requirements; it does not require any hazard warning on its label, under OSHA criteria.

EFFECTS OF OVEREXPOSURE: No significant health effects expected to arise from exposure during normal use.

EMERGENCY RESPONSE DATA: "Bubbled" plastic enclosed top and bottom between reflective metal foil. Incomplete combustion of plastic components may generate dense smoke, toxic fumes.

## 4. FIRST AID MEASURES

EYE CONTACT: Not expected to be a problem. Loosened particles or fibers may cause slight discomfort, such as that experienced from airborne dust. Irritation may arise from vapors that may form at elevated temperatures. Flush eyes with water. Get medical attention if eye irritation persists.

SKIN CONTACT: Not expected to be a problem. Loose particles or fibers may be mildly abrasive to skin. Individuals sensitive to anti-static or flame retardant additives may experience dermatitis. Wash exposed skin with soap and water. Get medical attention if skin irritation develops.

INHALATION: Not expected to be a problem. Vapors arising from heat treatment may cause respiratory irritation. If adverse effects occur, remove from exposure.

INGESTION: Not expected to be a problem. No significant health hazards identified. Material is physiologically inert. Ingestion of large amounts may cause gastrointestinal distress requiring medical attention.

## 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry Chemical, Carbon Dioxide, Water, Foam.

SPECIAL FIREFIGHTING PROCEDURES: Water or foam may cause frothing. Use water to keep fire-exposed material cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

FIREFIGHTING EQUIPMENT: Positive pressure self-contained breathing apparatus.

UNUSUAL FIRE & EXPLOSION HAZARD: This material emits dense, black, and potentially toxic smoke when it burns.

Flash Point: Not Determined

Autoignition Temperature: Not Determined

Flammable Limits: LEL and UEL Not Determined

HAZARDOUS COMBUSTION PRODUCTS: Incomplete burning can produce carbon monoxide, carbon dioxide, and/or other harmful byproducts.

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## 6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Not expected to be a problem.  
RELEASE / SPILL PROCEDURES: Pick-up and dispose as normal refuse.  
ENVIRONMENTAL PRECAUTIONS: Normal good environmental housekeeping, i.e., prevent spills from entering storm sewers / drains, and prevent disposal in local soil.  
PERSONAL PRECAUTIONS: See Section 8.

## 7. HANDLING AND STORAGE

HANDLING: No special precautions are necessary beyond normal good hygiene and workplace safety practices. Provide adequate ventilation.  
STORAGE: Store away from heat, ignition sources, open flame, combustible materials, strong oxidizers.  
PRECAUTIONS: Keep away from sources of ignition, e.g.: heat and open flame.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION: Use in adequately ventilated area. If dust or vapors arise from processing, local ventilation is recommended, though general ventilation may be adequate.  
RESPIRATORY PROTECTION: No special equipment required under ordinary conditions of use and with adequate ventilation. If ventilation is inadequate, use respiratory protection until adequate ventilation can be restored.  
EYE PROTECTION: No special equipment required. However, use of eye protection is good practice.  
SKIN PROTECTION: No special equipment required. However, use of protective gloves / clothing is good practice.  
EXPOSURE LIMITS: Primary Ingredients: None established  
Antimony Trioxide: ACGIH TWA: 0.5 mg/m<sup>3</sup>  
Dust: OSHA Total and Respirable: 15 mg/m<sup>3</sup> (particulate NOC)  
Nuisance Dust: ACGIH TLV-TWA: 10 mg/m<sup>3</sup>

## 9. TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: "Bubbled" plastic "sandwiched" between reflective metal foil, typically packaged in "plank" form  
AUTOIGNITION TEMP.: Not Determined  
COLOR: Reflective metal foil has shiny chrome-like appearance; internal plastic clear or tinted  
FLAMMABILITY: Not Classified  
FLASH POINT: Not Determined  
FREEZING POINT: Not Established  
MELTING POINT: 230° F. (110° C.) for plastic component  
ODOR: Negligible; slightly sweet, plastic odor

## 10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable  
CONDITIONS TO AVOID: Extreme heat and ignition sources, e.g.: sparks, open flames  
INCOMPATIBILITY: Strong oxidizers  
HAZARDOUS DECOMPOSITION: Temperatures above 480o F. may induce thermal degradation, potentially producing irritating vapors.  
HAZARDOUS POLYMERIZATION: Will not occur.

## 11. TOXICOLOGICAL DATA

ACUTE TOXICITY: Toxicity tests have not been conducted on this specific product. Hazards evaluation based on information available for similar products, ingredient materials, technical literature, etc. Handling and/or processing this material may generate dust and/or vapors that may be sufficiently dense to possibly be irritating to the eyes, skin, nose, and throat.

CARCINOGENIC COMPONENTS: Some forms of antimony trioxide may be possibly carcinogenic per IARC.

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## 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: Ecological testing of this product has not been conducted. Plastic components of this product photodegrade under lengthy exposures to UV light. May not decompose in modern sanitary landfills. Component materials may be recycled where adequate collection infrastructure and appropriate recycling facilities exist.

## 13. DISPOSAL CONSIDERATIONS (Based on evaluations of similar products and/or the components)

WASTE DISPOSAL: Dispose per applicable federal, state, and local regulations.

RCRA INFORMATION: The unused product is not, in our opinion, specifically listed by U.S. EPA as a hazardous waste [ 40 CFR 261D ]. It is not formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity, and it is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure.

## 14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION:	Not Regulated
INTERNATIONAL SEA TRANSPORT / I.M.O.; I.M.D.G.:	Not Determined / Not Regulated
INTERNATIONAL AIR TRANSPORT / I.A.T.A.; I.C.A.O.:	Not Determined / Not Regulated
EUROPEAN ROAD & RAIL / A.D.R.; R.I.D.:	Not Determined
CANADIAN TRANSPORT OF DANGEROUS GOODS:	Not Determined

## 15. REGULATORY INFORMATION

CERCLA 102A / 103: Product is not a Reportable Hazardous Substance under 40 CFR 302.4.  
OSHA: Product is not hazardous under OSHA 29 CFR 1910.1200 (d).  
TSCA: Components comply with U.S. Toxic Substances Control Act requirements.  
SARA III, Sec. 302: Product is not an "Extremely Hazardous Substance" under 40 CFR 355.  
SARA III, Sec. 311/312: No Reportable Hazard Categories under 40 CFR 370.  
SARA III, Sec. 313: A constituent of the flame retardant additive is reportable under Toxic Release program, per 40 CFR 372.

## 16. OTHER INFORMATION

CHEMICAL NAMES: Metal Foil / Polyolefin Polymer Multilayer Composite

INTENDED USE: Buildings' Insulation Material

INGREDIENTS: Major Components: Polyethylene, CAS No. 09002-88-4  
Aluminum, CAS No. 7429-90-5  
Minor Components: Anti-Static mixture; Colorant mixture; Fire Retardant mixture; Adhesive mixture

Information provided by sources external to our company and set forth herein is offered in good faith as accurate, but without guarantee. Safety precautions contained herein cannot anticipate all individual and unique situations. Conditions of use and suitability of the product for particular uses are beyond our control. All risks of use of the product are, therefore, assumed by the user, and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the product. Nothing herein is intended as recommendation for uses which infringe valid patents or as extension of license under valid patents. Appropriate warnings and safe handling procedures should be provided to users.

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