Pregis

# MATERIAL SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

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

SUPPLIER: **Pregis Innovative Packaging, Inc.**
**1900 West Field Court**
**Lake Forest, IL 60045**

CONTACTS: For additional product and/or MSDS information, please contact your Pregis products sales associate or customer service associate: (1-800-834-9441).

## 2. COMPOSITION / INGREDIENTS INFORMATION

INGREDIENTS: Non-hazardous Astro-Foil® and Astro-E® products are formulated to contain some or all of the following:
Polyethylene (> 90%); aluminum foil (<10%);
anti-static agent + colorant (< 1%);
fire retardant (< 1%), comprised of N,N-ethylene-bis(tetrabromophthalimide) + antimony trioxide

## 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.

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| 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.

## 6. ACCIDENTAL RELEASE MEASURES

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| 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

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| 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

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| 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 ventiliation 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. Products are not formulated to contain human skin sensitizers such as "natural rubber" latex, or other known human food allergens. However, use of protective gloves / clothing is good practice. | | |
| EXPOSURE LIMITS: | Primary Ingredients: | None established | |
| | Antimony Trioxide: | ACGIH TWA: | 0.5 mg.m$^3$ |
| | Dust: | OSHA Total and Respirable: | 15 mg/m$^3$ (particulate NOC) |
| | Nuisance Dust: | ACGIH TLV-TWA: | 10 mg/m$^3$ |

## 9. TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

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| 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 bubble is 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

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| 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

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| 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. |