# *WILLIAMS PRODUCTS, INC.*

**1750 MAPLELAWN DRIVE, TROY, MICHIGAN 48084**
**Toll Free:(248)-643-6400 Fax: (248)-643-7117**

Preparation Date: 1/1/2016
Revision: 1/1/2016

## SAFETY DATA SHEET

---

**Section 1** **Identification**

Product Name: Econ-O-Foam

Use: Protective packaging – Flexible polyethylene foam

Manufacturer/Distributor: Williams Products, Inc.
1750 Maplelawn Drive
Troy, MI 48084
(800) 521-9594
www.williamsproducts.net

Emergency Information: DOT EMERGENCY CHEMTEL: (800) 255-3924 (24hrs)
Information Phone No.: (800) 888-4910 (M-F : 8am - 5pm)

---

**Section 2** **Hazards Identification**

Classification: Not regulated per OSHA Hazard Communication Standard 29 CFR 1910.1200.

---

**Section 3** **Composition/Information of Ingredients**

| Chemical Name | Percent | CAS No. |
|---|---|---|
| Polyethylene resin | ≥84 | |
| Ethene/Butene Copolymer | | 25087-34-7 |
| Tris-nonylphenyl phosphite | | 26523-78-4 |
| Polyethylene Homopolymer | | 9002-88-4 |
| Crystalline silica | | 68855-54-9 |
| Hydrocarbon Foaming Agents | ≤5 | |
| Isobutane | | 75-28-5 |
| n-butane | | 106-97-8 |
| Talc (Magnesium silicate) | ≤4 | 14807-96-6 |
| Foam Processing Aid, Monodiglycerides | ≤2 | 67701-33-1 |
| Organic and/or inorganic colorants | ≤5 | Various |

Composition Comments: Organic and/or inorganic colorants, which may include carbon black pigment which is thoroughly bound to the polymer matrix.

---

| **Section 4** | **First-Aid Measures** |
|---|---|
| General Information: | Show this safety data sheet to the medical professional in attendance. Adverse health effects are not anticipated with use of this product as intended. If symptoms occur, follow first aid measures as appropriate. |
| In Case of Inhalation: | If symptoms are experienced, move victim to fresh air, if symptoms persist, obtain medical attention. |
| In Case of Skin Contact: | Wash contaminated skin with mild soap and water. Get medical attention if irritation develops or persists. |
| In Case of Eye Contact: | Rinse immediately with plenty of water, including under the eyelids. Get medical attention if irritation develops or symptoms persist. |
| In Case of Ingestion: | If gastric irritation or discomfort persists seek medical advice. |
| Symptoms and Effects: (Acute and Delayed) | Eye contact may cause slight irritation. In rare cases, individuals may experience irritation or reddening of skin. Inhalation of processing fumes or dusts may cause upper respiratory irritation. |

| **Section 5** | **Fire-Fighting Measures** |
|---|---|
| General Fire Hazards: | Flammability not established for this product as a whole. Polyethylene is combustible. Polyethylene foam also contains some residual flammable blowing agent, which might accumulate in confined spaces to produce concentrations in the explosive range. Processes such as grinding could produce fine dust and flammable vapors. Both could be potential explosion hazards. |
| Extinguishing Media: | Water, Foam, Dry Chemical, Carbon Dioxide. Use extinguishing media appropriate for surrounding material. |
| Special Fire Fighting Procedures: | Firefighters should use self-contained breathing apparatus and wear full protective equipment. Personnel/bystanders should be kept upwind of fire |
| Unusual Fire and Explosion Hazards: | Temperatures above 480°F could cause product degradation potentially producing toxic vapors including carbon monoxide, olefinic and paraffinic compounds, trace amounts of organic acids, ketones, aldehydes and/or alcohols. |

## Section 6 — Accidental Release Measure

| | |
|---|---|
| Personal Precautions and Protective Equipment: | Protective clothing is not required under normal conditions of intended use; however, the use of gloves and safety glasses is consistent with good manufacturing and hygienic practice. |
| Methods and Materials for Containing and Clean Up: | No special measures necessary beyond general housekeeping. Pick up and retaining material for recycling or disposal. |

## Section 7 — Handling and Storage

| | |
|---|---|
| Handling: | Further processing of polyethylene foam product with and fabrication processed such as slitting, grinding, skiving, sawing, routing, or die cutting that cuts cells can release residual flammable blowing agent. A flammable concentration could accumulate if air is not properly circulated. All sources of ignition should be prevented in areas where foam is fabricated. Humidifiers or ionized air blowers can be used to reduce the possibility of static spark. Grinding equipment and any bins or hoppers should be purged with a positive air flow to dissipate any build-up of blowing agent gases. Monitoring systems should be in palce to insure that a concentration of blowing agent does not accumulate during shutdowns or malfunctions. For hot wire cutting or thermal welding air flow should be provided to adequately disperse potential blowing agent build up. Control any vapor or dust emissions that may be generated by further processing of product. |
| Storage: | Always store polyethylene foam products in well-ventilated areas. Always keep foam products away from excessive heat and any sources of ignition such as sparks or flame. Never store foam in confined areas or sealed-off compartments. Foam scrap or fabricated parts for disposal should be stored and shipped in ventilated containers. When opening doors and unloading foam shipments, extinguish all possible sources of ignition such as matches, cigarettes, sparks, and lighters. Allow air circulation into the trailer for ten minutes after opening trailer doors before unloading foam. |

## Section 8 — Exposure Controls/Personal Protection

United States Occupational Exposure Limits:

| Component | CAS No. | Tpye | Value | Form |
|---|---|---|---|---|
| Nuisance dust | N/A | ACGIH TWA | 10mg/$m^3$ | Total dust |
| Nuisance dust | N/A | ACGIH TWA | 3mg/$m^3$ | Respirable dust |

| | | | | |
|---|---|---|---|---|
| Nuisance dust | N/A | OSHA PEL | 15mg/$m^3$ | Total dust |
| Nuisance dust | N/A | OSHA PEL | 5mg/$m^3$ | Respirable dust |
| Crystalline Silica | 68855-54-9 | OSHA TWA | 0.05mg/$m^3$ | - |
| Crystalline Silica | 68855-54-9 | ACGIH TWA | 0.05mg/$m^3$ | - |
| Isobutane | 75-28-5 | NIOSH TWA | 800ppm | - |
| n-Butane | 106-97-8 | ACGIH TWA | 800ppm | - |
| n-Butane | 106-97-8 | NIOSH TWA | 800ppm | - |
| Hydrous magnesium silicate | 14807-96-6 | NIOSH TWA | 2mg/$m^3$ | - |
| Hydrous magnesium silicate | 14807-96-6 | ACGIH TWA | 2mg/$m^3$ | - |
| Hydrous magnesium silicate | 14807-96-6 | OSHA PEL | 20mppcf | - |
| Hydrous magnesium silicate | 14807-96-6 | NIOSH IDLH | 1000mg/$m^3$ | - |

Engineering Controls: Local ventilation should be provided if product is further processed producing dust or fumes. General ventilation may also be used, but local ventilation is usually preferable.

General Information: The following general hygiene considerations are recognized as common, good industrial hygiene practices: wash hands after use and before eating, avoid breathing dust, and wear safety goggles.

Respiratory Protection: If product is being further processed producing dust or fumes, adequate ventilation should be provided. In case of inadequate ventilation or risk of inhalation of dust or fumes, wear a suitable air purifying respirator with particle filter or dust mask.

Skin Protection: Wear protective gloves. While protective gloves are not required under normal conditions of intended use, wearing protective gloves is consistent with good manufacturing/hygienic practice.

Eye/Face Protection: Wear safety glasses. While safety glasses are not required under normal conditions of intended use, wearing safety glasses is consistent with good manufacturing/hygienic practice and recommended if the product is further processed.

Ventilation: Local exhaust: Required if foam material

---

**Section 9** **Physical and Chemical Properties**

Appearance/Odor: Solid plastic foam in various colors. Odorless.

Auto-ignition Temperature: 343°C (polyethylene resin)

| | |
|---|---|
| Flammability (solid, gas): | Will burn, but does not ignite readily |
| Melting/Freezing Point: | 220°F |
| Boiling Point: | N/A |
| Vapor Pressure: | N/A |
| Relative Density: | 0.98-1.05 (polyethylene resin) |
| Decomposition Temperature: | >480°F |
| Vapor Density (Air=1): | N/A |
| Evaporation Rate: | N/A |
| Solubility in Water: | Insoluble in water |

---

**Section 10** **Stability and Reactivity**

| | |
|---|---|
| Stability: | The product is stable and non-reactive under normal conditions of use, storage, and transport. |
| Conditions to Avoid: | Avoid contact with strong oxidizers, excessive heat, sparks, or open flame. |
| Incompatibility: | Strong oxidizers. |
| Hazardous Polymerization: | Will not occur |
| Hazardous Decomposition | Temperatures above 480°F could cause product degradation potentially producing toxic vapors including carbon monoxide, olefinic, and paraffinic compounds, trace amounts or organic acids, ketones, aldehydes and/or alcohols. |

---

**Section 11** **Toxicological Information**

General Information on Likely Routes of Exposure:

| | |
|---|---|
| Ingestion: | No adverse effects known to be associated with ingestion of small amounts of this inert material. Ingestion of large quantities may result in gastrointestinal discomfort of distress. |

| | |
|---|---|
| Inhalation: | Inhalation of fumes from heated plastic may cause irritation of respiratory tract, chest discomfort, and/or dizziness. Inhalation of dust may cause respiratory irritation. Polyethylene dust from grinding and pulverizing operations is considered nuisance dust. |
| Skin Contact: | In rare cases, contact with sensitive individuals' skin may result in irritation or reddening of skin. |
| Eye Contact: | May cause slight irritation. |
| Acute Toxicity: | No data were identified for this product as a whole. Polyethylene resin (main ingredient) not considered to be toxic to humans or animals. Rats inhaling polyethylene dust developed mild inflammatory changes in the lungs. Prolonged inhalation of thermal degradation products from polyethylene caused neurological effects in rats. Animal studies showed no adverse health effects on the digestive system when fed up to 20% polyethylene. |
| Serious Eye Damage: | No data were identified for this product as a whole. At elevated temperatures, such as produced by hot cutting, fumes may cause eye irritation. |
| Skin Corrosion/Irritation: | No data were identified for this product as a whole. No skin effects are expected from polymer contact. |
| Respiratory Sensitization: | No date were found for this product as a whole. Inhalation at ambient temperatures unlikely except for dust from grinding. At elevated temperatures, such as produced by hot cutting, fumes may cause respiratory irritation. |
| Carcinogenicity: | Crystalline silica (<0.1%): IARC-classified 1 (proven for human); NTP-classified 2 (reasonably anticipated) target organ is the lung. Release of these materials may occur in small quantities during processing of the product, but is not expected to present a hazard. |
| STOT – Repeated Exposure: | No data were found for this product as a whole. Subchronic (50 to 90 day) feeding studies conducted on rats, dogs, and swine showed no effects from dietary levels of 1 10 20% powdered and shredded polyethylene. |

---

**Section 12** **Ecological Information**

| | |
|---|---|
| Ecotoxicity: | No data were identified for this product as a whole. Polyethylene resin (main ingredient) ecotoxicity is expected to be low. |

| | |
|---|---|
| Bioaccumulative Potential: | No data were identified for this product as a whole. Polyethylene resin (main ingredient) is not expected to bioaccumulate. |

---

**Section 13** **Disposal Considerations**

| | |
|---|---|
| Disposal Product: | Dispose waste according to applicable local, state, and federal regulations |

---

**Section 14** **Transport Information**

The transport regulation may vary based on the country of use. Check for the appropriate regulations in the country of transport or usage of this product.

---

**Section 15** **Regulatory Information**

29 CFR 1910.1200 Hazard Communication Standard (HCS): Not regulated

| | |
|---|---|
| TSCA (TSCA 12b): | Nonlphenol (a trvial component of polyethylene) |
| CERCLA 102A/103: | None |
| SARA III, Sec. 302: | None |
| CALIFORNIA Prop 65: | No label required. |

---

**Section 16** **Other Information**

List of Abbreviations:

| | |
|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| CERCLA | Comprehensive Enviromental Response, Compensation, and Liability Act |
| CFR | Code of Federal Regualtions |
| IARC | International Agency for Research on Cancer |
| IBC | International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk |
| MARPOL | International Convention for the Prevention of Pollution from Ships |
| NTP | National Toxicology Program |
| OSHA | Occupational Safety and Health Administration (United States) |
| PEL | Permissible Exposure Limit |
| PBT | Persistent, Bioaccumulative and Toxic |
| RCRA | Resource Conservation and Recovery Act |

| | |
|---|---|
| SARA | Superfund Amendments and Reauthorization Act |
| SDS | Safety Data Sheet |
| TSCA | Toxic Substances Control |
| TWA | Time Weighted Average |
| vPvB | Very Persistent and Very Bioaccumulative |