SAFETY DATA SHEET

1. PRODUCT AND SUPPLIER IDENTIFICATION

Product Name: Boltaron® thermoplastic sheet and film

Other Designations: Mixture of polyvinyl chloride, chlorinated polyvinyl chloride, acrylic polymers, impact modifiers, heat stabilizers, process aids, and lubricants.


Product Use / General Use: Thermoforming

Manufacturer’s Name: BOLTARON, INC.
A SIMONA COMPANY
ONE GENERAL STREET,
NEWCOMERSTOWN, OH 43832

Address:

Emergency Telephone: 740-498-5900

SDS DATE: November 3, 1999  REV. DATE: January 8, 2016

2. HAZARD(S) IDENTIFICATION

Under normal handling conditions, Boltaron film and sheet are classified as articles and do not present any recognized health hazards.

However, heating of this material to degradation temperature may generate small quantities of fumes containing unidentified compounds of hydrogen degradation, organic acids and esters, and hydrogen chloride.

Operations such as machining, routing or sawing may generate dust containing low levels of the following ingredients:

EFFECT OF OVEREXPOSURE

ACUTE: Vapors and fumes from processing, especially at elevated temperatures, may cause irritation of the eyes, throat and upper respiratory tract.
CHRONIC: The following materials are minor encapsulated components of the product and are not believed to constitute an exposure hazard. However, good industrial hygiene practices should be followed to avoid ingestion or inhalation of fumes or dust.

ANTIMONY TRIOXIDE: Antimony compounds are generally less toxic than antimony. Principal organs attacked include certain enzyme systems (protein and carbohydrate metabolism), heart, lungs, and the mucous membrane of the respiratory tract. Chronic poisoning presents symptoms of dry throat, nausea, headache, sleeplessness, loss of Appetite and dizziness. Liver and kidney degenerative changes are late manifestations.

ORGANOTIN COMPOUNDS: Causes irritation of the eyes and upper respiratory tract. Produces mild conjunctivitis of the eye. Some people may have an allergenic response.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>% wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyvinyl chloride; ethane, chloro-homopolymer</td>
<td>9002-86-2</td>
<td>0-99</td>
</tr>
<tr>
<td>Chlorinated polyvinyl chloride</td>
<td>68648-82-8</td>
<td>0-99</td>
</tr>
<tr>
<td>Mixture of processing aids, impact modifiers, heat stabilizers, lubricants and pigments</td>
<td>Trade Secret</td>
<td>2-50</td>
</tr>
<tr>
<td>Organotin</td>
<td>Trade Secret</td>
<td>1-4</td>
</tr>
<tr>
<td>Antimony Trioxide</td>
<td>1309-64-4</td>
<td>0-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyvinyl chloride</td>
<td>None estab.</td>
</tr>
<tr>
<td></td>
<td>Particles not otherwise classified: 10 mg/m³</td>
</tr>
<tr>
<td>Chlorinated polyvinyl chloride</td>
<td>None estab.</td>
</tr>
<tr>
<td></td>
<td>Particles not otherwise classified: 10 mg/m³</td>
</tr>
<tr>
<td>Organotin</td>
<td>0.1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>0.1 mg/m³</td>
</tr>
<tr>
<td>Antimony Trioxide</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>0.5 mg/m³</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Skin Contact:** Not expected to cause skin irritation.

**Eye Contact:** If a dust particle enters the eye, flush with water and consult a physician if necessary.

**Inhalation:** If dust particles are inhaled, remove to fresh air and consult a physician if necessary.
5. FIREFIGHTING MEASURES

Because PVC compounds contain chlorine in the polymer molecule, these materials are difficult to ignite, and burn slowly. Like all organic materials, this product is combustible and can be forced to burn by continuous application of intense heat. Protect from open flame and maintain proper clearance when using heating devices or other heat sources.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Because static sparking can occur during handling, all flammable materials should be removed from the immediate vicinity.

When forced to burn, combustion products may contain carbon monoxide, hydrogen chloride and smoke.

EXTINGUISHING MEDIA: Dry chemical, foam, water fog or spray.

SPECIAL FIRE FIGHTING PROCEDURES: For significant fires, wear full protective equipment and NIOSH-approved pressure demand, self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK: N/A (solid sheet)

WASTE DISPOSAL METHOD: Disposal of waste material must be handled in a manner which complies with all local, state and federal EPA regulations.

7. HANDLING AND STORAGE

Handling Precautions: Control dust formation from cutting or machining and avoid inhalation.

Storage Requirements: Store in a cool and dry controlled environment.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION: If necessary, use NIOSH-approved, chemical cartridge respirator.

PROTECTIVE GLOVES: Use heavy cotton or insulated gloves to handle hot plastic.

EYE PROTECTION: SAFETY GLASSES ARE RECOMMENDED FOR ALL INDUSTRIAL WORKPLACES.

VENTILATION: Processing which generates vapors, dust or fumes should only be performed with adequate ventilation.
9. PHYSICAL / CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not Soluble</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Sheet or film - slight characteristic odor</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.20 – 1.50</td>
</tr>
<tr>
<td>Percent Volatile</td>
<td>0.1%</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
</tbody>
</table>

“N/A” - No applicable information found.

10. STABILITY AND REACTIVITY

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

**Incompatibility (Materials to avoid):** Avoid contact of heated PVC sheeting or film with acetal or acetal copolymers and with amine-containing materials. At elevated temperatures, these materials are mutually destructive and involve rapid degradation of the products.

**Hazardous Decomposition Products:** Hydrogen chloride, organic acids and esters, hydrocarbon fragments.

11. TOXOLOGICAL INFORMATION

**Skin Irritation:** Not expected to cause skin irritation.

**Eye Irritation:** Dust particles may cause mechanical irritation to the eyes.

**Respiratory Irritation:** Dust particles may cause respiratory irritation.

**Sensitization/Allergic Reaction:** Not expected to cause sensitization or allergic reaction.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Dispose of waste in accordance with federal, state, and local regulations. Waste can be recycled.
14. TRANSPORT INFORMATION

Not regulated as a hazardous material for transportation.

15. REGULATORY INFORMATION

This product may contain antimony trioxide which is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. Consult Section 3 - Composition.

U.S. Superfund Amendments & Reauthorization Act (SARA) 355 (Extremely Hazardous Substances): Not listed.
U.S. Superfund Amendments & Reauthorization Act (SARA) 313 (Specific Toxic Chemical Listings): Not listed.
U.S. Toxic Substances Control Act (TSCA): Not listed.
California Proposition 65 Carcinogens: Not listed.
Canadian Domestic Substances List (DSL): Not listed.
Canadian Ingredient Disclosure List (limit 0.1%) Not listed.
Canadian Ingredient Disclosure List (limit 1%): Not listed.
Hazard Pictograms: Not Applicable
Signal Word: Not Applicable
RoHS: Not listed.
REACH: Not listed.

16. OTHER INFORMATION

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