CHEMICAL PRODUCT / COMPANY IDENTIFICATION

Material Identification:
» Foil Prelam .010” (PL10FF)
» Registered Foil Prelam .010” (PL10FFR)
» Embedded Registered Spot Hologram Prelam, .005” and .006” (PL5HR), (PL5CLHR), (PL6HR)
» Embedded Unregistered Spot Hologram Prelam, .005” and .006” (PL5HNR), (PL5CLHNR), (PL6HNR)

Product Use:
OSHA Hazard Communication Standard (29 CFR 1910.1200) requirements for Material Safety Data Sheets do not apply to the product described in this information sheet. This product is excluded as an article.
Uses include platen laminating with PVC.

Company Identification:
Manufacturer/Distributor: CompoSecure, LLC
Phone Numbers:
Product Information 908-518-0500

COMPOSITION / INFORMATION ON INGREDIENTS

Components:
<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Number %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foil Prelam .010”</td>
<td></td>
</tr>
<tr>
<td>Registered Foil Prelam .010”</td>
<td></td>
</tr>
<tr>
<td>Embedded Registered Spot Hologram Prelam, .005” and .006”</td>
<td></td>
</tr>
<tr>
<td>Embedded Unregistered Spot Hologram Prelam, .005” and .006”</td>
<td></td>
</tr>
</tbody>
</table>

They are made from Polyester Terephthalate that has been metallized

Coextrusion layers may be present. Various VC fillers or additives used to modify the physical appearance and/or surface properties of the various film types may be present. Concentrations of the following may range from 1-20:

» Isophthalate Copolymer (Coextrusion layer) 24938-04-3
» Plasticizers 0-9
» Impact Modifiers 0-4
» Surfactants 0-2
» Lubricants and Processing Aids 0-2
» Stabilizers 0-1
HAZARDS IDENTIFICATION

Emergency Overview:
No known health hazards.
Appearance: Solid Film
Odor: Odorless
Read the entire MSDS for a more thorough evaluation of the hazards.

Potential Health Effects:
Decomposition products caused by overheating polyethylene terephthalate and PVC may cause skin, eye or respiratory irritation. Combustion products may include: Hydrogen Chloride gas. Can cause severe irritation and corrosive burns of eyes, skin and upper respiratory tract. Acute overexposures can cause fluid in the lungs (pulmonary edema). Molten polymer can cause thermal burns.
All ingredients are fully incorporated into the product. Exposure to fillers encapsulated in the film polymer is not likely during normal use.
Medical conditions aggravated by exposure to the product: Asthma, chronic lung disease, and skin rashes.

Carcinogenicity Information:
The following components are listed by IARC, NTP, OSHA or ACGIH as carcinogens.

<table>
<thead>
<tr>
<th>Material</th>
<th>IARC, NTP, OSHA, ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>2B</td>
</tr>
</tbody>
</table>

FIRST AID MEASURES

Inhalation:
No specific intervention is indicated as the compound is not likely to be hazardous by inhalation.
However, remove to fresh air if exposed to fumes from overheating or combustion. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician if necessary.

Skin Contact:
The compound is not likely to be hazardous by skin contact but cleansing the skin after use is advisable.
If molten material gets on skin, cool rapidly with cold water. Do not attempt to remove material from skin. Obtain medical treatment for thermal burn.

Eye Contact:
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Ingestion:
Ingestion is not an expected route of exposure during normal use of the product. If ingested, consult a physician.

Notes to Physicians: Prolonged eye irritation may occur from pieces of debris sticking to the eyeball or eyelids.
FIRE FIGHTING MEASURES

**Flammable Properties:**
Films can be combusted only by remaining in contact with flame. If flame source is stationary, the film will shrink away and self-extinguish. Film remaining in contact with flame can continue to burn slowly, dropping flaming liquid which can spread the fire.

Irritating fumes may be evolved at decomposition temperatures.

During processing, films may pick up a strong static charge. Avoid discharge onto dust or solvent laden air, as a flash fire or explosion may result.

**Extinguishing Media:**
Use appropriate media for surrounding material.

**Fire Fighting Instructions:**
Keep personnel removed upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

ACCIDENTAL RELEASE MEASURES

**Safeguards (Personnel):**
NOTE: Review Fire Fighting Measures and Handling (Personnel) sections of this document before proceeding with clean-up. Use appropriate Personnel Protective Equipment during clean-up.

**Spill Clean Up:**
Films and film scraps can create a slipping hazard. Collect product for recovery or disposal.

HANDLING AND STORAGE

**Handling (Personnel):**
Do not breathe vapors or fumes that may be evolved during processing. Avoid skin contact with sharp film edges.

**Handling (Physical Aspects):**
Rolls of film may telescope. Use caution when handling.

Rolled film should be stored at intended processing temperature for approximately 24 hours prior to use.

Plastic packaging materials can pick up static charge. Rolls packaged with shrink-wrap (or other plastic overwrap) should be opened or unwrapped only in non-process areas where ignition sources such as solvents are not in use or in storage.

**Storage:**
Store away from heat and sources of ignition. Do not store in direct sunlight. Avoid prolonged storage in high or low temperatures. Recommended storage temperatures are 20 F (-7 C) to 100 F (38 C).

ENGINEERING CONTROLS

General exhaust is acceptable except where overheating can occur during processing. Remove fumes released by decomposition with local exhaust if overheating occurs.

Movement of film over metal or rollers will produce a surface static charge on the film. Consider processing design and procedures that will reduce or dissipate this charge, and eliminate the possibility of unwanted electrical discharge to people, equipment and materials.

Use adequate ventilation. If decomposition occurs: Use with adequate ventilation to meet the limits listed in Exposure Guidelines.
PERSONNEL PROTECTIVE EQUIPMENT

Respiratory Protection:
If dust generation or decomposition occurs: Use NIOSH-approved respiratory protection as specified by an Industrial Hygienist or other qualified professional if concentrations exceed the limits listed in Exposure Guidelines. Suggested respiratory protection: N95, fit testing must be completed prior to respirator use. Use acid/gas cartridge if hydrogen chloride gas is generated.

Eye Protection:
Wear safety glasses/goggles to avoid eye contact.

Skin Protection:
Wear appropriate gloves to avoid any skin injury.

Protective Clothing:
If there is a potential for contact with hot/molten material, wear heat resistant impervious clothing and footwear. Special protective clothing is not needed for normal use. Gloves are recommended as good industrial practice.

EXPOSURE GUIDELINES

General Product Information:
The ACGIH and OSHA have not developed exposure limits for this product.

Component Exposure Limits:

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL (OSHA)</th>
<th>TLV (ACGIH)</th>
<th>AEL* (CompoSecure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene Terephthalate</td>
<td>None Established</td>
<td>None Established</td>
<td>10 mg/m³, 8 Hr. TWA, total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 mg/m³, 8 Hr. TWA, respirable dust</td>
</tr>
<tr>
<td>Barium Sulfate</td>
<td>15 mg/m³, total dust, 8 Hr. TWA</td>
<td>10 mg/m³, total dust, 8 Hr. TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 mg/m³, respirable dust, 8 Hr. TWA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polypropylene</td>
<td>None Established</td>
<td>None Established</td>
<td>10 mg/m³, 8 &amp; 12 Hr. TWA, total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 mg/m³, 8 &amp; 12 Hr. TWA, respirable dust</td>
</tr>
</tbody>
</table>
### Silica Gel

<table>
<thead>
<tr>
<th></th>
<th>PEL (OSHA)</th>
<th>TLV (ACGIH)</th>
<th>AEL* (CompoSecure)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80 mg/m³ % SiO₂</td>
<td>10 mg/m³, 8 Hr. TWA, total dust</td>
<td>2 mg/m³, 8 Hr. TWA, respirable dust</td>
</tr>
<tr>
<td>Or see</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diatomaceous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earth (uncalcined)</td>
<td>[61790-53-2]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Carbon Black

<table>
<thead>
<tr>
<th></th>
<th>PEL (OSHA)</th>
<th>TLV (ACGIH)</th>
<th>AEL* (CompoSecure)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.5 mg/m³, 8 Hr. TWA</td>
<td>3.5 mg/m³, 8 Hr. TWA</td>
<td>0.5 mg/m³, 8 &amp; 12 Hr. TWA, (Polynuclear Aromatic Hydrocarbon Content &lt;0.1%) Includes Channel, Lamp, and Thermal Black</td>
</tr>
</tbody>
</table>

### Titanium Dioxide

<table>
<thead>
<tr>
<th></th>
<th>PEL (OSHA)</th>
<th>TLV (ACGIH)</th>
<th>AEL* (CompoSecure)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15 mg/m³, total dust, 8 Hr. TWA</td>
<td>10 mg/m³, total dust, 8 Hr. TWA</td>
<td>10 mg/m³, total dust, 8 Hr. TWA 5 mg/m³, respirable dust, 8 Hr. TWA</td>
</tr>
</tbody>
</table>

### Stabilizers (Proprietary):

ACGIH 2 mg/m³ TWA (inhalable fraction, vapor and aerosol)

### Processing Aids (Proprietary):

OSHA 15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)

### Lubricants (Proprietary):

ACGIH 2 mg/m³ TWA (respirable fraction)

OSHA 20 mppcf

### Additional Compounds Which May Be Formed during Processing:

Hydrogen chloride (7647-01-0)

ACGIH 5ppm Ceiling

OSHA 5 ppm Ceiling; 7 mg/m³ Ceiling

*AEL is CompoSecure, LLC’s Acceptable Exposure Limit. Such limits shall take precedence where governmentally imposed occupational exposure limits lower than the AEL are in effect.*
PHYSICAL AND CHEMICAL PROPERTIES

Physical Data:

<table>
<thead>
<tr>
<th>Form</th>
<th>Film</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Melting Point</td>
<td>~500 F (~260 C)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.2 - 1.38</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Negligible @ 20 C (68 F)</td>
</tr>
</tbody>
</table>

STABILITY AND REACTIVITY

Chemical Stability:
Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials:
No reasonable foreseeable.

Decomposition:
Decomposition temperature: > 300 C (>572 F)
Decomposition products include carbon dioxides, aldehydes, terephthalic acid.

Conditions to Avoid:
Strong oxidizers, amines, and acetal or acetal copolymers.

Polymerization:
Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data:
Polyethylene Terephthalate
OralALD > 10,000 mg/kg in rats
Polyethylene Terephthalate is not a skin irritant, but is a mild eye irritant.

Component Carcinogenicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stabilizers (Proprietary)</td>
<td>ACGIH: A4-Not Classifiable as a Human Carcinogen IARC: Supplement 7, 1987; Monograph 40, 1986</td>
</tr>
<tr>
<td>Lubricants (Proprietary)</td>
<td>ACGIH: A4-Not Classifiable as a Human Carcinogen IARC: Supplement 7, 1987; Monograph 40, 1986</td>
</tr>
</tbody>
</table>
ECOLOGICAL INFORMATION

Ecotoxicological Information:
No information is available. Toxicity is expected to be low since films are insoluble in water. Films are not biodegradable.

Component Analysis – Ecotoxicity – Aquatic Toxicity:
Stabilizers (Proprietary)
LC50 (48 hr) killifish: 2.5mg/L.
EC50 (5.15.30 min) Photobacterium phosphoreum: 7.82-8.98 mg/L; 15 degrees C.

DISPOSAL CONSIDERATIONS

Waste Disposal:
Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

TRANSPORTATION CONSIDERATIONS

Shipping Information:
Not DOT regulated.

REGULATORY INFORMATION

U.S. Federal Regulations:
TSCA Inventory Status: In compliance with TSCA Inventory requirements for commercial purposes.

Component Analysis:
None of the components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65, or CERCLA (40 CFR 302.4).

SARA 311/312 Physical and Health Hazard Categories:

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate (acute) Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Delayed (chronic) Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release or Pressure</td>
<td>No</td>
</tr>
<tr>
<td>Reactive</td>
<td>No</td>
</tr>
</tbody>
</table>

SARA Regulations Sections 313 and 40 CFR 372: This product does not contain any chemicals subject to the reporting requirements of SARA.

Clean Air Act Status: This product does not contain, and is not manufactured with ozone depleting chemicals as defined in 58 FR 8136, February 11, 1993 (final rule).
**State Regulations (US):**

CONEG Status: All PL6 products are compliant with CONEG regulations; the sum of the concentrations of cadmium, chromium, lead and mercury does not exceed 100 ppm. None of these metals is used as an ingredient or processing aid.

**Component Analysis – State:**

The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS #</th>
<th>CA</th>
<th>FL</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stabilizers</td>
<td>Proprietary</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Processing Aids</td>
<td>Proprietary</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Lubricants</td>
<td>Proprietary</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Other Regulations:**

**General Product Information:**

No information available for product.

**Component Analysis – WHMIS IDL:**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stabilizers</td>
<td>Proprietary</td>
<td>1%; English item 238; French item 1007</td>
</tr>
<tr>
<td>Processing Aids</td>
<td>Proprietary</td>
<td>1%; English item 1725; French item 1504</td>
</tr>
</tbody>
</table>

**Other Information:**

**NFPA, NPCA-HMIS:**

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>NPCA-HMIS Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

**Additional Information:**

Medical Use: Caution: Do not use in medical applications involving permanent implantation into the human body. For other medical applications, please contact a CompoSecure, LLC representative.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.