MATERIAL SAFETY DATA SHEET - PVC Printed Label Film

Product Summary - PVC (Polyvinyl chloride) Heat Shrinkable Packaging Film

• Recycling Symbol: 03 PVC
• Recycling Considerations: General re-melting and filtration process can be used.
• Disposal: Should not be burned, generates HDI. General dumping and landfill system compatible. Non-biodegradable.
• Heat Resistance: 70-80° C before deformation
• Cold Resistance: -30° C before brittle/cracking (can be extended to -40° C with additives)
• Fat Resistance: Excellent
• Steam Resistance: Good
• Gas Resistance: Good
• Shrink Ratio: up to 63% of original layflat size
• Food Grade (US FDA Standard) film can be requested for direct-contact food applications.
• Recommended Shrink Temperature: 110-150° C

SECTION I - PRODUCER

Manufacturer: New Solid International Corp. / DFC Packaging Pty. Ltd.
Emergency Telephone: Taiwan +886-7-241-9966; Australia +61-3-9562 2055
Product Class: Polyvinyl Chloride (PVC) Manufacturer’s Code Identification
Product Name: Solid Seal® PVC Shrinkable Film          Formula: NT

SECTION II - INGREDIENTS

<table>
<thead>
<tr>
<th>Main Ingredient</th>
<th>Typical Percent</th>
<th>OSHA PEL Gas Fume Dust ppm mg/m³</th>
<th>ACGIH TLV Gas Fume Dust ppm mg/m³</th>
<th>CAS Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyvinyl Chloride resin (Not a Hazardous material, under OSHA Standards)</td>
<td>70-80%</td>
<td>N/D</td>
<td>N/D</td>
<td>N/A</td>
</tr>
</tbody>
</table>

SECTION III - PHYSICAL DATA

Melting Range: 200-250° C  Vapor Density: N/A  Evaporation Rate: N/A
Boiling Point: 310° C  Vapor Presssure: N/A  Specific Gravity: 1.4kg/dm³
Appearance and Odor: Clear Plastic Film, with light odor
Solubility in Water: Insoluble

Notes: N/D = Not Determined  N/A = Not Applicable

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: N/A  LEL: N/A  UEL: N/A
Extinguishing Media: Water, Carbon Dioxide, or other standard fire-fighting agents
Special Fire Fighting Procedures: Use self-contained breathing apparatus.

Notes: N/D = Not Determined  N/A = Not Applicable
SECTION V - REACTIVITY DATA

**Stability:** Stable  
**Hazardous Polymerization:** Will not occur  
**Conditions to Avoid:** Extreme Heat or Flame  
**Materials to Avoid:** None Known  
**Hazardous Decomposition Products:** Hydrogen Chloride, Carbon Monoxide  
**Notes:** N/D = Not Determined  
N/A = Not Applicable

SECTION VI - HEALTH HAZARD DATA

**Routes of Entry:** Inhalation - Yes  
Skin - No  
Ingestion - No  
**Health Hazards:** Product in bulk is not considered hazardous. None known for PVC; thermal decomposition products may produce eye, nose and throat irritation. When sealed using equipment with Teflon-covered heating elements, this product does not thermally decompose.  
**Carcinogenicity:** NTP - No  
IAR Monographs - No  
**Acidity:** None  
**Signs and Symptoms of Overexposure:** None Known  
**Medical Conditions Generally Aggravated by Exposure:** None, when using proper sealing equipment.  
**Emergency and First Aid Procedures:** None Known

SECTION VII - SAFETY IN HANDLING AND USE

**Steps to be Taken in Case Material is Released or Spilled:** No Special Procedure  
**Waste Disposal Method:** For disposal of this material as a waste, act in accordance with all applicable federal, state and local waste management regulations.  
**Precautions to be Taken in Handling and Storing:** As with any plastic film, adequate ventilation is recommended during hot wire cutting if fumes develop. The hot wire should be kept clean and adjusted, using the minimum temperature necessary to effectively cut off and seal. If there is no hot-wire cutting involved in the process, and therefore no fumes, no special precautions are necessary.  
**Other Precautions:** None Known

SECTION VIII - SPECIAL PROTECTION INFORMATION

**Respiratory Protection:** Not necessary when using appropriate sealing system or when no sealing is used.  
**Ventilation:** If decomposition products exceed TLVs or PELs  
**Protection Gloves:** Not Required  
**Eye Protection:** Not Required  
**Other Protective Equipment:** Not Known  
**Work Hygienic Practices:** Use appropriate work practices to maintain exposures below TLV or PEL.

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