Material Safety Data Sheet

SECTION 1: Product and Company Identification

Avery Dennison
Reflective Films Division
6565 West Howard Street
Niles, Illinois, 60714 USA
www.reflectives.averydennison.com

Monday – Friday, 8:00am – 6:00pm EST
Company Phone Number: (847) 647-7717
Company Toll Free: (800) 327-5917
24-Hour Medical Emergency: 911
24-Hour Chemical Emergency: (800) 424-9300

Product Name: T-9500 Omni-View Series
Alternate Names: High Performance Prismatic Sheeting,

Product Codes:
- T-9500, White
- T-9501, Yellow
- T-9505, Blue
- T-9507, Green
- T-9508, Red
- T-9511, Fluorescent Yellow
- T-9513, Fluorescent Yellow-Green
- W-9514, Fluorescent Orange

Issue Date: August 25, 2005
Supercedes Date: August 25, 2005

SECTION 2: Hazardous Identification

Emergency Overview
Appearance: Flexible sheets of polymer, which are White, Yellow, Blue, Green, Red, Fluorescent Yellow, Fluorescent Yellow-Green or Fluorescent Orange in color and may emit a slight odor.

Below decomposition temperature, this product has no significant health or toxic hazards.

WARNING
Effects of Over-exposure: heating above 500°F produces hazardous fumes. Fumes from decomposition are toxic when inhaled and are irritating to mucous membranes.

Potential Health Effects: (See Section 11 for more information)

Likely Routes of Exposure: Eye Contact, Skin Contact, and Inhalation
Eye: May Cause Slight Irritation
Skin: May Cause Slight Irritation
Inhalation: Dust formed by grinding sawing, cutting, etc. the OSHA-PEL for nuisance dust of 15mg/m³-total dust, 5 mg/m³-respirable dust is recommended.
Chronic Effects: None Known

Medical Conditions Aggravated by Exposure: None Known
This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

The material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: Not considered to be harmful to aquatic life.

**SECTION 3: Composition / Information on Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Weight %</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>P (EA/MMA)</td>
<td>9010-88-2</td>
<td>&gt; 49%</td>
<td>OSHA/TWA None</td>
</tr>
<tr>
<td>Methyl Methacrylate</td>
<td>80-62-6</td>
<td>&lt; 0.2%</td>
<td>ACGIH/TWA 100 ppm</td>
</tr>
<tr>
<td>Bisphenol A Polycarbonate</td>
<td>25971-63-5</td>
<td>&gt; 49%</td>
<td>None None</td>
</tr>
<tr>
<td>Methylene Chloride</td>
<td>75-09-2</td>
<td>&lt; 0.1%</td>
<td>3 ppm 3 ppm</td>
</tr>
</tbody>
</table>

**SECTION 4: First Aid Measures**

Eye or Skin Contact: Flush with water. See physician if irritation persists.
Inhalation: Remove to fresh air.
Ingestion: This is not a likely route of exposure. However, if material is ingested, do not induce vomiting. Contact a physician.

**SECTION 5: Fire Fighting Measures**

Suitable Extinguishing Media: Foam, CO₂, Dry Chemical, and Water Fog.

Unsuitable Extinguishing Media: Alcohol Foam

Products of Combustion: Carbon Monoxide, Carbon Dioxide, Bisphenol A, Diphenyl carbonate and phenol derivatives.

Protection of Firefighters: Firefighters should wear a positive pressure self-contained breathing apparatus and remain upwind when possible.

Unusual Fire and Explosion Hazards: This material is combustible. Burns vigorously with intense heat.

Auto-Ignition Temperature: 300°C \(716°F\)  
UEL: Not Applicable
Flash Point: Not Applicable  
LEL: Not Applicable
SECTION 6: Accidental Release Measures

Personal Precautions: Product is stable polymer and requires no personal protection when at room temperature.

Environmental Precautions: Not classified as hazardous waste.

Methods of Containment: Product is stable solid and can be contained by mechanical means.

Methods for clean up: Spills can be cleaned by vacuum, sweeping, or shovel.


SECTION 7: Handling and Storage

Handling
Keep away from temperatures in excess of 200 °F. Use grounding and bonding apparatus when rolling and unrolling material to prevent static discharge.

Storage
Store in temperatures between 68° F and 77° F (20°C and 25°C) and relative humidity of 50% ± 5%.

SECTION 8: Exposure Controls / Personal Protection

Exposure Guidelines

<table>
<thead>
<tr>
<th></th>
<th>OSHA/TWA: None</th>
<th>ACGIH/TWA: None</th>
</tr>
</thead>
<tbody>
<tr>
<td>P (EA/MMA)</td>
<td></td>
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<tr>
<td>Methyl Methacrylate</td>
<td>OSHA/TWA: 100ppm</td>
<td>ACGIH/TWA: 100ppm</td>
</tr>
<tr>
<td>Bisphenol A Polycarbonate</td>
<td>OSHA/TWA: None</td>
<td>ACGIH/TWA: None</td>
</tr>
<tr>
<td>Methylene Chloride</td>
<td>OSHA/TWA: 3ppm</td>
<td>ACGIH/TWA: 3ppm</td>
</tr>
</tbody>
</table>

The following are considered good industrial hygiene practices.

Engineering Controls: Local exhaust required in the vicinity of hot processing.

Eye/Face Protection: Safety glasses are recommended as a good safety and industrial hygiene practice.

Skin Protection: Wear cloth gloves if desired.

Respiratory Protection: None needed.

General Hygiene Considerations: There are no known hazards associated with this material when used as recommended. Following general hygiene considerations are recognized as common good industrial hygiene practices. Wash thoroughly after handling and before eating or drinking.
SECTION 9: Physical and Chemical Properties

Appearance: Reflective, optical polymer with liner and pressure-sensitive adhesive.
Odor: Slight (Not Toxic)
Odor threshold: Not Applicable
pH: Not Applicable
Melting Point: 132°C / 270°F (Minimum pour point)
Softening Point: 150°C / 302°F
Boiling Point: Not Applicable
Flash Point: Not Applicable
Evaporation Rate: Not Applicable
Vapor Pressure: Not Applicable
Vapor Density (Air = 1): Not Applicable
Specific Gravity: 1.10 – 1.25 (Water = 1.00)
Solubility (water): None
Auto-Ignition Temperature: 716°F
Decomposition Temperature: 716°F
Volatile: Vol %: < 1% Wgt %: < 1%

SECTION 10: Stability and Reactivity

Stability: Stable
Hazardous Polymerization: Will Not Occur
Conditions to Avoid: Excessive Heat, >500°F
Incompatible Materials: Avoid contact with acids, alkalies, and strong oxidizers.
Hazardous Decomposition Products: Methyl methacrylate monomer and Carbon Monoxide

SECTION 11: Toxicological Information

Toxicity Data for: Bisphenol A Polycarbonate
Acute Effects: Gases and fumes evolved during thermal decomposition of similar products have caused respiratory irritation in mice, as reported in Toxicologic evaluation of thermoplastic resins at and above processing temperature, G.K. Sangha, M. Matijak and Y. Alarie, Department of Industrial Environmental Health Sciences, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, 15216, AIDA Journal (42), July 1981.

SECTION 12: Ecological Information

No ecological information available.
SECTION 13: Disposal Considerations

Disposal: Dispose of in accordance with federal, state and local regulations. Not classified as hazardous waste.

SECTION 14: Transportation Information

Technical Shipping Name: Retroreflective Sheeting

DOT Domestic Hazard Class or Division: Non-Regulated
IMO/IMDG (Ocean): Non-Regulated
ICAO/IATA (Air): Non-Regulated

SECTION 15: Regulatory Information

OSHA Status: This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SECTION 16: Other Information

None

THE INFORMATION CONTAINED HEREIN IS CORRECT TO THE BEST OF OUR KNOWLEDGE. THE RECOMMENDATIONS AND SUGGESTIONS CONTAINED IN THIS BULLETIN ARE MADE WITHOUT GUARANTEE OR REPRESENTATION AS TO RESULTS. IF POSSIBLE, WE SUGGEST THAT YOU EVALUATE THESE RECOMMENDATIONS AND SUGGESTIONS PRIOR TO USE.