1. COMPANY AND PRODUCT IDENTIFICATION

Trade Name: PILEN (Plain), POLINEX (Co-extruded), POLIPER (Cavitated), POLILABEL (Label), POLIMET (Metallized), POLI-M (For Metalization)

Company Name & Address: POLİNAS PLASTİK San. ve Tic. A.Ş.
Organize Sanayi Bölgesi
Cumhuriyet Cad. No: 2-26
45030 MANİSA/TÜRKİYE

Tel: +90 236 226 2200
Fax: +90 236 233 2525
Emergency phone: +90 535 590 0269

Chemical Classification: Polyolefin

Product Description: Polymer Article / Packaging Material / Labeling Material & Associated Applications

2. COMPOSITION / INGREDIENT

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>9003-07-0</td>
<td>Polypropylene</td>
<td>&gt;90</td>
</tr>
</tbody>
</table>

THE FOLLOWING FILLERS AND/OR ADDITIVES MAY BE PRESENT:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>25895-47-0</td>
<td>PP Terpolymer</td>
<td>&lt;12</td>
</tr>
<tr>
<td>471-34-1</td>
<td>Calcium Carbonate</td>
<td>&lt;10</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium Dioxide</td>
<td>&lt;10</td>
</tr>
<tr>
<td>7429-90-5</td>
<td>Aluminum</td>
<td>&lt;0.02</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Skin Contact: The contact with hot molten material may cause severe burns.

Eye Contact: If heated to 235 °C, the product may form vapors or fumes which may cause irritation to the eye.

Ingestion: The materials are biologically inert.

Environmental Impact: Non biodegradable, non compostable.

Inhalation: If heated to 235 °C, the product may form vapors or fumes which may cause irritation to the respiratory tract.

Physico-Chemical Hazards: The material is combustible if exposed to flames. Handling of material may create electrical charges and sparks which may be a cause of ignition for other flammable materials.
4. FIRST AID MEASURES

Eye Contact: Exposure to hot molten material. Treat the part with cold water. Seek immediately special treatment at hospital or medical center. In case of irritation caused by vapors/fumes; wash with copious volumes of water, and seek medical advice.

Skin Contact: Exposure to hot molten material. Treat the affected part with cold water. No attempt should be made to detach molten product adhering to the skin or to remove clothing attached with molten material. Injured areas should be treated as burns.

Route of Exposure Inhalation: Fumes and vapors produced by heated or burned material may be irritating for the respiratory tract. Bring patient into fresh air. Get medical advice if the symptoms continue.

5. FIRE FIGHTING MEASURES

Fire Class Regulation: A

Technical Measures: Stop the fire spreading. Call the fire brigade immediately. Evacuate non-essential personnel. Protective clothing, goggles and self-contained breathing equipment should be made available for firemen.

Extinguishing Media Suitable: CO2, Halon, AFF (Aqueous Film-Forming Foam) Foam, water spray (mist) only to cool the surfaces exposed to the fire.

Not to Be Used: Do not use water jets (stick jets) for extinguishing fire, since they could help to spread the flames.

Exposure Hazards: Complete combustion with an excess of oxygen forms; CO2 and water vapor. Partial combustion forms also; CO, fumes and vapors irritating to the respiratory tract.

Protective Equipment For Firefighters: Wear suitable breathing equipment in case of risk of exposure to vapor or fumes.

6. ACCIDENTAL RELEASE MEASURES

After Spillage On Soil: PP film on the floor can cause slipping. Recover the spilled material by sweeping and dispose of it. Dispose safely in accordance with local and national regulations.

On Water: If the material has been discharged into a water stream, inform the authorities of the possible presence of floating debris.
7. HANDLING & STORAGE

Handling: Film rolls and pallets are heavy. Film edges are sharp and may cause cuts / wounds. Exercise in handling the material, most care.

Storage Conditions: Store at ambient temperature and humidity (preferably 25 °C, 50% relative humidity) in original packaging. Store away from heating sources, avoid static electricity buildup. When pallets are stored in racks, it should be checked whether the pallets fit the racks.

Vbf - Klasse (Germany): Not applicable

Specific Use(s): No information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Standard usage conditions of material do not generate the formation of dust particles. In case of risk of exposure to dust, vapor or fumes generated by thermal decomposition of the material, it is recommended that a local exhaust system is placed above the converting equipment (hood) and the working area must be properly ventilated.

Skin And Body Protection: If contact with hot molten material is possible, wear heat-insulating and chemical-proof gloves and clothes as well as a face shield.

Eye Protection: When the splashing of hot molten material may occur, wear goggles/face shield.

Other Personal Protection: Slabs of film on the floor can be slippery. Exercise due care in areas when spillage occur.

9. PHYSICAL & CHEMICAL PROPERTIES

Color: Transparent, metallized or white.

Odor: Odorless.

Melting range, °C: from 160 to 165

Flash Temperature (ASTM D1929), °C: 350

Auto-Ignition Temperature °C: >380
Biaxially Oriented Polypropylene (BOPP) Film

MATERIAL SAFETY DATA SHEET
(in accordance with Directive 1907/2006 EC)
Revised Date: 08.05.2013

Explosion limit: Not applicable.

Density, mass at (20°C),(kg/m³): 550-1000

Solubility in water at 20 °C (mg/l): Insoluble

Solubility in organic solvents at 20 °C (mg/l): Insoluble

10. STABILITY & REACTIVITY

Stability: The material is stable under normal storage, handling and operating conditions (up to 45°C, 50% RH).

Hazardous Reactions: The material is combustible if exposed to flames. Handling of material may create electrical charges and sparks which may be a cause of ignition of other flammable materials.

Conditions To Avoid: Avoid contact with strong oxidizing materials and fluorine. Avoid proximity or contact with flames or heat to temperatures exceeding 235 °C.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: The material is biologically inert and not harmful.

Inhalation: Fumes and vapors produced by heated or burned material may be irritating for the respiratory tract. Bring patient into fresh air. Get medical advice if the symptoms continue.

Skin Contact: The material is not irritating. The contact with the hot molten material may cause severe thermal burns. Thermal decomposition materials are produced at elevated temperatures and these may be irritating to the respiratory tract.

Eye Contact: Because of its composition, the material should be considered not irritating.

Specific Effects: At best of the present knowledge, the material is not Genotoxic, Carcinogenic or harmful for reproduction.

12. ECOLOGICAL INFORMATION

Ecological Effects: Avoid dissemination in the environment.

Biodegradation: The material is not biodegradable.
13. DISPOSAL CONSIDERATIONS

Waste Disposal: Always dispose of in accordance to local regulations. The material can be disposed or in the following ways.

* Landfill
* Incineration (Thermal recovery)
* Recycling (Reprocessing)

14. TRANSPORT INFORMATION

Un Number: Not applicable.

Road (ADR)/Rail (RID): Not restricted for transportation.

Marine (IMO-IMDG): Not restricted for transportation.

Air (ICAO/IATA): Not restricted for transportation.

15. REGULATORY INFORMATION

The product is suitable to come into contact with foodstuffs, being in conformity with:


U.S.A.: F.D.A. Regulations Title 21 CFR par. 177.1520 and 176.170

16. ADDITIONAL INFORMATION

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. The information and recommendations contained herein are to the best of Polinas Plastic's knowledge and belief accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made with regards to accuracy, reliability or completeness. Conditions of use of the material are under the control of the user; therefore, it is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.