Overview

PALGLAS offers unsurpassed light transmission, matching that of glass while weighing half. Inherently UV resistant, PALGLAS is the ultimate choice in high traffic acoustic barriers, resisting gasses emitted from vehicles.

PALGLAS has high clarity and formability that opens a world of design options for designers, from small fabricated items to transparent furniture.

Main Benefits

- Clear - Up to 92% light transmission
- Inherently UV resistant
- Stronger than glass and less than half its weight
- High gloss appearance
- Can be formed and fabricated
- Easy to mount
- Good chemical resistance
- Good thermal insulation

Typical Applications

- High traffic acoustic barriers
- Lightweight high clarity glazing
- Attractive fabricated items
- Transparent furniture
- Light fixtures
- Illuminated and 3D signage

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In as much as Palram Industries has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the material’s suitability for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any Palram Industries patent covering such use or as recommendations for use of such materials in the infringement of any patent. Palram Industries or its distributors cannot be held responsible for any losses incurred through incorrect installation of the material. In accordance with our company policy of continual product development you are advised to check with your local Palram Industries supplier to ensure that you have obtained the most up to date information.

**Weather and UV Resistance**

PALGLAS is inherently resistant to UV radiation. Coupled with its wide service temperature range (-40°C to 80°C), it becomes suitable for outdoor applications. A limited warranty against yellowing is available.

**Resistance to Chemicals**

PALGLAS is resistant to a wide range of chemicals at room temperature. Detailed information is available upon request.

**Forming and Fabrication**

PALGLAS can be fabricated, machined and thermoformed. Please note: predrying is strongly recommended for best results when thermoforming. PALGLAS is easily hot line bent and shaped into a wide variety of forms. PALGLAS can be bonded to itself and other materials. Additional details on how to work with PALGLAS is available upon request.

**Installation and Maintenance**

Large PALGLAS sheets should always be installed using a framing system. PALGLAS thermal expansion is eight times that of glass and three times that of metal, this important factor must be taken into account when glazing. The polyethylene protective masking must be removed immediately after installation. PALGLAS can easily be cleaned with a soft cloth or sponge, using a mild soap or detergent. Rinse and dry with a soft 100% cotton cloth or moist cellulose sponge to prevent water spotting. Ask your Palram representative to assist you in selecting PALGLAS sheet with dimensions that are suitable for your applications.

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**Product Availability**

<table>
<thead>
<tr>
<th>Colors</th>
<th>Transparent: Clear</th>
<th>Translucent: White Opal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness - Standard (mm)</td>
<td>2 - 10</td>
<td></td>
</tr>
<tr>
<td>Thickness - Special (mm)</td>
<td>1.5, 1.8, 12 - 30</td>
<td></td>
</tr>
<tr>
<td>Width x Length (mm)</td>
<td>1250 x 2050 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1220 x 2440 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2050 x 3050 mm</td>
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</tbody>
</table>

* Other colors and dimensions are available upon request, subject to minimum quantity. Please contact your PALRAM distributor for more information.

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**Acoustic Barrier Related Certification***

<table>
<thead>
<tr>
<th>Standard</th>
<th>Definition</th>
<th>Classification</th>
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<tbody>
<tr>
<td>EN 1794</td>
<td>Road traffic noise reducing devices: Non-acoustic performances</td>
<td>Compliance</td>
</tr>
<tr>
<td>EN 1793</td>
<td>Road traffic noise reducing devices: Acoustic performance</td>
<td>Compliance</td>
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</tbody>
</table>

* Applies to PALGLAS 15mm & 20mm sheets.

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**Typical Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>ASTM Method</th>
<th>Conditions</th>
<th>Units</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>(D-792)</td>
<td>g/cm³</td>
<td></td>
<td>1.19</td>
</tr>
<tr>
<td>HDT (Heat deflection temperature)</td>
<td>(D-648)</td>
<td>Load: 1.82 MP</td>
<td>°C</td>
<td>91</td>
</tr>
<tr>
<td>Service temperature range</td>
<td></td>
<td>°C</td>
<td></td>
<td>-40 to +80</td>
</tr>
<tr>
<td>Coefficient of linear thermal expansion</td>
<td>(D-696)</td>
<td>cm/cm °C</td>
<td>7.0 x 10⁻⁵</td>
<td></td>
</tr>
<tr>
<td>Thermal conductivity</td>
<td>(C-177)</td>
<td>W/m K</td>
<td></td>
<td>0.19</td>
</tr>
<tr>
<td>Tensile strength at break</td>
<td>(D-638)</td>
<td>1 mm/min.</td>
<td>MPa</td>
<td>70</td>
</tr>
<tr>
<td>Tensile modulus of elasticity</td>
<td>(D-638)</td>
<td>1 mm/min.</td>
<td>%</td>
<td>3,200</td>
</tr>
<tr>
<td>Flexural strength</td>
<td>(D-790)</td>
<td>1 mm/min.</td>
<td>MPa</td>
<td>110</td>
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<tr>
<td>Flexural modulus</td>
<td>(D-790)</td>
<td>1 mm/min.</td>
<td>MPa</td>
<td>3,200</td>
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<tr>
<td>Izod impact strength noched</td>
<td>(D-256)</td>
<td>23°C</td>
<td>J</td>
<td>16</td>
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<tr>
<td>Rockwell hardness</td>
<td>(D-785)</td>
<td>R scale</td>
<td></td>
<td>123R</td>
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<tr>
<td>Light transmission</td>
<td>(D-1003)</td>
<td>Clear sheet</td>
<td>%</td>
<td>92</td>
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<tr>
<td>Haze</td>
<td>(D-1003)</td>
<td>Clear sheet</td>
<td>%</td>
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<tr>
<td>Yellowness index</td>
<td>(D-1003)</td>
<td>Clear sheet</td>
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<td>&lt;1.5</td>
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