Product Information
Based On 24½/16" (618mm) Wide SafeMag Flexible Magnetic Sheet

Description

SafeMag™ is a unique backcoated flexible magnetic sheeting. The backcoating is a safe barrier between the magnetic surface and the surface to which it is applied, which is an important new benefit to sign makers in applications like vehicle signs. The backcoating is equally important to screeners where “blocking” is a problem when printed magnetics need to be stacked during the printing process.

Magnetic Properties

High intensity lines of magnetic polarity run parallel to the edge of the sheet. Magnetic poles are placed on one surface of the sheet for optimum holding power. The optimum magnetic strength is on the inside of the roll. Full width 24½/16” polarization exhibits 85 lbs. (39 kgs) per square foot holding power in the 30 mil (.76 mm) thickness. Maximum energy product is .78x10⁶ gauss oersteds.

Physical Properties (Typical)

Flexibility—can be wrapped around a 1” radius without cracking at 68°F. (20°C.)
Machinability—diecutting, knifecutting, etc., with ease.
Specific Gravity—is 3.8.
Hardness-Shore D55

<table>
<thead>
<tr>
<th>Property</th>
<th>Longitudinal</th>
<th>Transverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile</td>
<td>922 lbs./sq. in.</td>
<td>714 lbs./sq. in.</td>
</tr>
<tr>
<td>Elongation</td>
<td>65%</td>
<td>43%</td>
</tr>
<tr>
<td>Tear-Graves</td>
<td>155 lbs./ln.</td>
<td>172 lbs./ln.</td>
</tr>
<tr>
<td>Tear-Elmendorf</td>
<td>22 gm/mm</td>
<td>27 gm/mm</td>
</tr>
<tr>
<td>Shrinkage 158°F (70°C.) 7 days</td>
<td>1.5%</td>
<td>.4%</td>
</tr>
</tbody>
</table>

Product Specifications: Sheeting

Laminates include various films including vinyl, polypropylene, polyethylene and papers.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>THICKNESS *.001&quot; INCL. LAMINATE</th>
<th>WIDTH TOLERANCE</th>
<th>TYPICAL LENGTH</th>
<th>WEIGHT LBS.</th>
<th>MAGNETIC FULL LBS./FT.SQ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 mil White Matte</td>
<td>18 mil (.46 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>69 lbs. (31 kgs)</td>
<td>45</td>
</tr>
<tr>
<td>15 mil High Gloss</td>
<td>18 mil (.46 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>69 lbs. (31 kgs)</td>
<td>45</td>
</tr>
<tr>
<td>15 mil No Laminate</td>
<td>15 mil (.38 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>60 lbs. (27 kgs)</td>
<td>45</td>
</tr>
<tr>
<td>15 mil P.S.A.*</td>
<td>19 mil (.48 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>72 lbs. (33 kgs)</td>
<td>45</td>
</tr>
<tr>
<td>20 mil White Matte</td>
<td>23 mil (.58 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>92 lbs. (42 kgs)</td>
<td>60</td>
</tr>
<tr>
<td>20 mil High-Gloss</td>
<td>23 mil (.58 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>92 lbs. (42 kgs)</td>
<td>60</td>
</tr>
<tr>
<td>20 mil No Laminate</td>
<td>20 mil (.51 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>80 lbs. (36 kgs)</td>
<td>60</td>
</tr>
<tr>
<td>20 mi P.S.A.*</td>
<td>24 mil (.61 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>88 lbs. (40 kgs)</td>
<td>60</td>
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<tr>
<td>30 mil White Matte</td>
<td>33 mil (.84 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>122 lbs. (55 kgs)</td>
<td>85</td>
</tr>
<tr>
<td>30 mil High-Gloss</td>
<td>33 mil (.84 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>118 lbs. (54 kgs)</td>
<td>85</td>
</tr>
<tr>
<td>30 mil No Laminate</td>
<td>30 mil (.76 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>115 lbs. (52 kgs)</td>
<td>85</td>
</tr>
<tr>
<td>30 mil P.S.A.*</td>
<td>34 mil (.86 mm)</td>
<td>+1/16”-0 (+1.59 mm -0)</td>
<td>100’ (30.5 m)</td>
<td>125 lbs. (57 kgs)</td>
<td>85</td>
</tr>
</tbody>
</table>

*P.S.A. = Pressure Sensitive Adhesive

Packaging

SafeMag sheeting is supplied in roll lengths of 25 ft. (7.6 m), 50 ft. (15.2 m), 100 ft. (30.5 m) or larger according to customer requirements.
Dimensional Characteristics

Stability—of the applied films and SafeMag™ sheeting is excellent throughout -40°F to 160°F (-40°C to 71°C.)
Weather Resistance—Excellent.

Durability—The magnet contains no plasticizing agents or solvents and, under normal use, will give years of service. If laminated with vinyl, the vinyl does contain plasticizers.

Processing Performance

Top-coated versions of SafeMag enhance ink adhesion by screen-printing, handlettering, offset letterpress and hot stamping. Please consult your ink supplier for the recommended maximum quality product.

Caution should be exercised to use only supplier-recommended thinners. All inks should be pre-tested.

■ Consult supplier for recommended flood coating procedures.

SafeMag Features

■ Superior magnetics. 12.5 poles per inch, or per customer requirements.
■ Available in special slit widths and sign blanks.
■ Easily diecut.
■ Thickness tolerance: ± .0015 in. (± .038 mm)

■ Slit Width: + 1/16” -0 ( + 1.59 mm -0)
■ Cut Length: + 1/4” -0 ( + 6.35 mm -0)
■ Custom lengths available on quantity orders.
■ Splice-free rolls on request.
■ Unique non-hazardous, lead-free matrix.

Laminate Features

■ Specially top-coated laminates assure ink adhesion for spectrums of inks—including vinyl and enamel inks.
■ Dimensionally stable.

■ Vinyls—UV resistant for exceptional outdoor weatherability.
■ Special UV ink coatings optional.

Laminate Selections

■ Standard White Matte.
■ Flat White and Premium High-Gloss White.
■ Colors—Standard and custom colors.

■ Chrome, Gold and Brushed Silver.
■ Pressure Sensitive adhesive backing (P.S.A.).

Usage

■ Toys, novelties, sales promotions, die-cut letters, blanks, numbers, architectural designs, visual aids, display boards, decoration panels, nameplates, production planners, etc.

■ Signage.
■ Advertising Specialties.
■ Medical.