Surface protective materials for colored steel plates & stainless steel during CO₂ laser process

**SPV-C-500**

### Outline

SPV-C-500 is a surface protective material using polyethylene film, which is developed by utilizing Nitto Denko’s proprietary technology. This product is suitable for surface protection of colored steel plates during process and transportation and stainless steel during CO₂ laser cutting process.

### Construction

- Acrylic pressure sensitive adhesive
- Polyethylene film

### Features

- Minimal change in adhesive strength after laminating enables easy peeling.
- The transparency allows appearance inspection of the surface condition of the substrate after processes like bending and CO₂ laser cutting.
- Strong adhesive type suitable for protection of rough colored metal or CO₂ cutting process.
- Acceptable use on stainless steel up to 16 gauge.

### Applications

1. Surface protection for colored steel plates during process and transportation.
2. CO₂ laser cutting process for stainless steel (not good for Fiber laser)

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### Standard Size/Color

<table>
<thead>
<tr>
<th>Item</th>
<th>Thickness</th>
<th>Width</th>
<th>Length</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPV-C-500</td>
<td>0.060(mm)</td>
<td>1250(mm)</td>
<td>100/200/500(M)</td>
<td>Clear</td>
</tr>
<tr>
<td></td>
<td>[2.36(mil)]</td>
<td>[49.2(inch)]</td>
<td>[109/218/545(yd)]</td>
<td></td>
</tr>
</tbody>
</table>

*Contact us for information concerning sizes.

### General properties

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>C-500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness *1</td>
<td>mm</td>
<td>0.060</td>
</tr>
<tr>
<td></td>
<td>[mil]</td>
<td>[2.36]</td>
</tr>
<tr>
<td>Adhesive Strength *2</td>
<td>N/20mm [oz/inch]</td>
<td>2.50 [11.42]</td>
</tr>
<tr>
<td>Tensile Strength *3</td>
<td>N/20mm [lbs/inch]</td>
<td>25 [7.1]</td>
</tr>
<tr>
<td>Elongation *3</td>
<td>%</td>
<td>250</td>
</tr>
</tbody>
</table>

Test Method

*1:Nominal thickness  
*2:Adherent: SUS430BA, Tensile speed : 300mm/min(12inch/min), Peeling angle:90°  
*3:Tensile speed 300mm/min(12inch/min), strength and elongation when breaking
Precautions

-Duly inspect the adaptability of this product to your intended use, prior to its application. We may conduct the adaptability test in your favor. However, its content and results do not guarantee your use. It is of your responsibility to ultimately determine its adaptability.

-The characteristics and performance of this product depends on the type of adherend, environment of use, and conditions/period after application. Always test (including the appearance) before changing the adherend (composition/surface roughness), conditions or use.

-When the product is applied to PVC adherends with plasticizer or surface-active adherends (electrolyzed, chemically treated, polished, etc.), it may become difficult to release or may tend to leave deposits, as time passes.

-When applying the product to a display material, test with particular attention on appearance defects. Stain, cloudiness or unevenness may appear on the surface of the display material, depending on its type. Traces of air bubbles may be left if they are trapped during application.

-Aforementioned problems may also arise when the product is stored for a long period of time after application.

-Do not use the product outdoors.

-Remove any grease, moisture or dust on the adherend before application.

-When coating after the surface protective material has been peeled, products should be used upon giving sufficient consideration to surface washing, below-surface processing and sintering conditions and confirming the adhesiveness of the coating.