**Description**

DPS-500 is hydrophilic polyurethane waterstop of liquid for sheet pile interlocks.

**Use**

Because of its high expansion coefficient (5 times) and its quick expansion in the presence of moisture, DPS-500 is ideally suited for use as a water-stop on sheet piles.

**Installation**

Clean dirt and debris from the interlock area of the pile DPS-500 is poured into the interlock area of sheet pile to a depth of 5mm. The sheet piles can be driven after a curing time of approximately 24 hrs.

Treated sheet piles should be protected from moisture before they are driven. If long term storage is anticipated it would be best to invert the sheet pile and cover to protect from moisture.

After approximately 24 hrs of curing time the sheet piles can be driven. The DPS-500 will cure enough on the surface in that time to hold it in place. The driving procedure will break the cured surface and allow the DPS-500 to fill the voids in the interlock area. Contact with moisture will cause expansion and from a complete waterstop.

**Installation Description**

**INDIVIDUAL SHEET** (Z type sheet pile)

**MIDDLE JOINT**

```
<table>
<thead>
<tr>
<th>Side</th>
<th>Middle Joint</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DPS 500</strong></td>
<td><strong>DPS 500</strong></td>
</tr>
</tbody>
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Place a piece of tape over each end of the interlock to prevent the DPS-500 from flowing out of the interlock. Fill the middle joint with DPS-500. If the material overflows it will not be a problem. The side joint should be filled to a depth of approximately 5mm.

**TAPE ON EACH END**

Brushing the DPS-500 to the sides of the interlock area after pouring the DPS-500 to a depth of 5mm is recommended as shown.

**Information**

Contact with water will induce cured DPS-500 to expand five times by volume and effectively prevent water intrusion in the interlock areas of sheet piles. In its cured state DPS-500 can withstand a hydrostatic head of approximately 50m. It adheres well to the sheet pile and does not tear off during the driving process.

DPS-500 cures into a rubber like state. It does not contain any toxic solvents and is safe to handle. The performance of DPS-500 will not...
ONE COMPONENT PU SEALANT FOR SHEET PILES

HYPER SEAL DPS-500

degrade under continuous water contact. It is a flame-resistant, environmentally safe product. Heat build up during the driving process will not affect the DPS-500.

Cured DPS-500 can be removed from the sheet piles by applying water to the retrieved sheet piles. Apply water to the interlock area and peel the DPS-500 from the interlock.

DPS-500 performs in aggressive ground water substances and has good resistance to a number of chemical contaminates. Some chemical in higher concentrations may affect the performance of DPS-500.

Properties of DPS-500

<table>
<thead>
<tr>
<th>Properties</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light-Yellow transference liquid</td>
</tr>
<tr>
<td>Viscosity</td>
<td>5,000±2,000cPS at 25°C</td>
</tr>
<tr>
<td>Solid Content (%)</td>
<td>85±2%</td>
</tr>
<tr>
<td>Solvent Composition</td>
<td>Xylene</td>
</tr>
</tbody>
</table>

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<tr>
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<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Semi transference and soft film</td>
</tr>
<tr>
<td>Physical Properties</td>
<td>Tensile Strength(kgf/㎠): over 10</td>
</tr>
<tr>
<td></td>
<td>Elongation(%): over 450%</td>
</tr>
<tr>
<td>Curing Time</td>
<td>Inner 24hrs(RT, 75%RH)</td>
</tr>
<tr>
<td>Swelling Rate</td>
<td>Over 400%(2 days in water at RT)</td>
</tr>
</tbody>
</table>

Handling & Storage

Hyper Seal DPS-500 can be stored for 6 months at below 25°C. Please avoid exposure to humidity or temperature above 50°C for long time. Please avoid contamination of water or alcohol. The product is very sensitive to air, therefore you must use all the product after open the container. Packing: 20kg pail can

Cleaning the interlock part of sheet pile with brush or air blow

Attach a piece tape over each end of the interlock to prevent the DPS-500 from out of the interlock.

The piles may be driven after the DPS-500 has fully cured or after the DPS-500 has cured to at least “Gel” state. Curing time is approximately 24 hrs.

Expansion Graph

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GLOBAL PILING SOLUTIONS

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