**Highlights**

- **Operational Depth Range:** (Down to 9,000 Meters)
- Offers extremely high impact resistance PLUS buoyancy
- Delivers 5X more lift than standard materials
- Can be easily machined to shape & drilled for inserts or attachments
- Standard Forms and Customization Options

**Premium Performance**

Damage Shield - XTB is a low-density thermoplastic syntactic material specifically formulated to provide extremely high toughness while still providing buoyancy in deep-water applications. Used in applications normally suited for solid polymers or composites, Damage Shield - XTB offers both impact resistance and lift.

**Industry Applications**

Providing more than 5 times the lift than traditional materials, Damage Shield - XTB is ideally suited for high abuse areas such as bumpers, impact pads or structural supports for AUVs and ROVs.

**Product Availability**

Damage Shield – XTB is available in sheet form and may be readily used for customer installation. Standard sheet sizes range from 1.0” x 24” x 48” up to 4” x 24” x 48”. Custom sizes and coatings are available upon request.

This engineered thermoplastic may be painted with standard marine grade coatings to color match any vehicle, and is easily machined to shape and may be drilled and tapped for insert installation or through-hole attachment.

**Typical Properties**

<table>
<thead>
<tr>
<th></th>
<th>Density</th>
<th>Depth Rating</th>
<th>Hydrostatic Crush</th>
<th>Compressive Strength</th>
<th>Compressive Modulus</th>
<th>Flex Strength</th>
<th>Flex Modulus</th>
<th>Tensile Strength</th>
<th>Tensile Modulus</th>
<th>Shear Strength</th>
<th>Shear Modulus</th>
<th>Thermal Conductivity</th>
<th>CTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>XTB 820</td>
<td>51.2 (0.82)</td>
<td>22,960 (7000)</td>
<td>&gt;24,000 (&gt;1,655)</td>
<td>16,500 (113)</td>
<td>618 (4.26)</td>
<td>9,073 (62.1)</td>
<td>739 (510)</td>
<td>7,250 (50.0)</td>
<td>805 (5.55)</td>
<td>TBD</td>
<td>TBD</td>
<td>118 (0.17)</td>
<td>19.0E-06 (32.4E-06)</td>
</tr>
<tr>
<td>XTB 880</td>
<td>54.9 (0.88)</td>
<td>29,520 (9000)</td>
<td>&gt;24,000 (&gt;1,655)</td>
<td>17,400 (120)</td>
<td>680 (4.29)</td>
<td>9,188 (62.9)</td>
<td>813 (5.54)</td>
<td>8,300 (57.2)</td>
<td>880 (6.07)</td>
<td>TBD</td>
<td>TBD</td>
<td>132 (0.18)</td>
<td>17.0E-06 (30.6E-06)</td>
</tr>
</tbody>
</table>

For pricing information, contact ESS Sales. Tel. +1.508.226.3907   Email: tech@esyntactic.com