Micropore, Inc. has developed a revolutionary reactive plastic for use in adsorbent applications. **ExtendAir** Reactive Plastic Cartridges (RPCs) are designed for rebreathing and life support equipment, replacing the granular CO₂ scrubbers currently used. This patented technology dramatically improves duration and ease-of-use, while eliminating many of the problems associated with granular adsorbents.

**HOW** much better? At a minimum, duration is improved 25% due to a higher density of adsorbent alone. As the use conditions become more extreme (higher work rates, lower temperatures, higher pressures), the performance advantages are even greater. This graph shows the increase in duration (at 32°F and 150 ft. depth) compared to granules at various breathing rates.

<table>
<thead>
<tr>
<th>Gas Flow (l/min)</th>
<th>RPC</th>
<th>Granules</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>45</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>60</td>
<td>1.50</td>
<td>1.50</td>
</tr>
</tbody>
</table>

**Features • Problems Solved**

- Increased adsorbent density over granules
- Improved mean duration or a smaller, lighter scrubber
- Adsorbent powder bound in plastic matrix
- Elimination of powdering, reducing incidence of caustic cocktail
- Cartridge instead of loose granules
- Ease of use – installs and removes in seconds
- Individually packaged; simply open and use
- Convenient shipping, handling, and storage
- Optimized adsorbent thickness and rib size
- Greater control over duration and breathing resistance
- Factory-molded in air channels
- Repeatable, predictable scrubber performance

"A revolutionary reactive plastic for use in adsorbent applications ...RPC"