**1051**

**PURE CHLOROBUTYL LINING**

February 23, 2010

**Polycorp 1051** is a black 50A durometer pure Chlorobutyl with soft natural rubber tie gum. Excellent for chemical resistance at elevated temperatures. Superior lining to handle strong sodium hypochlorite solutions up to 15% available chlorine. Suitable for 70% hydrofluoric acid service at maximum 125°F/52°C. A-I-E Cure.

**Application Notes:**
- **Skive** – Butt seam with a cap strip (3” wide x 1/8” thick) of 2007
- **Repair** – Same
- **Cured Durometer** – Shore A Durometer on top surface: 50 ± 5.
- A heated table to warm the rubber to 110–120°F (43°C) is recommended
- **Spark Test** – Refer to section 13 of the Application Manual

**Adhesive Notes:**
See Section 9 of the Polycorp Rubber Lining Application Manual for specific cementing / adhesion notes.
For proper adhesion, temperatures must be over 60°F (15°C) and must not exceed 120°F (49°C). Use adheres in well ventilated area and always consult the material safety data sheet for specific precautions.

<table>
<thead>
<tr>
<th>Coat</th>
<th>Polycorp Adhesive</th>
<th>Approved Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Coat on Metal</td>
<td>C-90 Primer</td>
<td>Chemlok 289</td>
</tr>
<tr>
<td>2nd Coat on Metal</td>
<td>C-91 Intermediate</td>
<td>Chemlok 290</td>
</tr>
<tr>
<td>3rd Coat on Metal</td>
<td>C-202S Tack</td>
<td>Chemlok 286</td>
</tr>
<tr>
<td>4th Coat on lining</td>
<td>C-202S Tack</td>
<td>Chemlok 286</td>
</tr>
</tbody>
</table>

For distributors of Chemlok adhesives, see Section 9 of the Application Manual

**Curing:**
Cure time adjustments may be required to compensate for specific conditions. See Section 11 of the Application Manual for detailed instructions.

**Autoclave Method – Up to 1/4” thickness:**
1 ½ hours at 260°F/127°C (20 psi) or alternate cure 1 hour at 292°F/144°C (45 psi).

**Internal Steam Method- Up to 1/4” thickness:**
7 hours at 260°F/127°C (20 psi) or alternate cure 12 hours at 240°F/116°C (10 psi).

**Atmospheric Steam Method – Up to ¼” thickness:**
Minimum 24 hours @ 212°F/100°C

**Storage:**
Store in a cool, dry area.

**Shelf Life:**
- Stored below 50°F (10°C) 180 days
- Stored between 51 and 70°F 60 days
- Stored between 71 and 90°F 30 days
- Do not store above 90°F (32°C)

Storage, handling and application methods must conform to the Polycorp Rubber Lining Application Manual.
Typical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>ASTM Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness (Face)</td>
<td>50A ± 5</td>
<td>D2240</td>
</tr>
<tr>
<td>Tensile Strength (min, psi)</td>
<td>1200</td>
<td>D412</td>
</tr>
<tr>
<td>Elongation at Break (min, %)</td>
<td>500</td>
<td>D412</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.21</td>
<td>D927</td>
</tr>
<tr>
<td>Adhesion to Metal (min, lbs)</td>
<td>25</td>
<td>D429</td>
</tr>
<tr>
<td>Maximum Operating Temperature for Optimum Service Life</td>
<td>104°C/ 220°F</td>
<td>N/A</td>
</tr>
</tbody>
</table>

All physical property values developed and measured using a press-cured sample sheet prepared in accordance with ASTM D3182.

PRECAUTIONS:

- All seams should be made using 45° skive butt seam and covered with a cap strip (3" wide x 1/8" thick) of plain chlorobutyl 2007.
- Swab mating surfaces of cap strip and lining with toluol solvent.
- **Do not use cement on a cap strip.**
- **Preheat cap strips for approximately 5 minutes on a 180 °F/82°C heat table.** Thoroughly seal edges of cap strip with gooseneck stitches.
- Preheating chlorobutyl lining before application will enhance the workability of this ling. **Do not expose Tie Gum of the 1051 material.**