

TECHNICAL DATA SHEET

1051 Page 1 of 2

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 adhesives in well ventilated area and always consult the material safety data sheet for specific precautions.

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

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

TECHNICAL DATA SHEET

1051 Page 2 of 2

Typical Properties:

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

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.**