

1051

PURE CHLOROBUTYL LINING

March 2015

Polycorp 1051 is a black 50A durometer chlorobutyl with soft natural rubber tie gum. It is an excellent lining for chemical resistance at elevated temperatures. It is specially developed to handle strong sodium hypochlorite solutions up to 15% available chlorine. It is also suitable for 70% hydrofluoric acid service at maximum 125°F/52°C. Operating temperature range is from - 4°F (-20°C) to 220°F(104°C).

APPLICATION NOTES:

- **Skive** – Skived butt seam with 2007 cap strip
- **Repair** – Same. Refer to section 11 of application manual.
- **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 6 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.

CURING:

Cure time adjustments may be required to compensate for specific conditions. See Section 10 of the Application Manual for detailed instructions.

Autoclave Method – Up to 1/4” thickness:

- 1½ hours at 260°F/127°C (20 psi)
- 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)
- 12 hours at 240°F/116°C (10 psi).

Atmospheric Steam Method – Up to ¼” thickness:

Minimum 30 hours @ 212°F/100°C

Coat	Polycorp Adhesive	Approved Equivalent
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

STORAGE:

Store in a cool and dry area.

Shelf Life	
Stored below 50°F (10°C)	180 days
Stored between 51 and 70°F	90 days
Stored between 71 and 90°F	45 days
Do not store above 90°F (32°C)	

Depending on storage conditions it may be possible to use rubber linings beyond the recommended shelf life however additional testing must be completed. Please contact Polycorp for recommended test procedures. A sample of the rubber lining can also be sent back to Polycorp for verification.

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

TYPICAL PROPERTIES:

Property	Value	ASTM Test Method
Hardness (Face) (points)	50A ± 5	D2240
Tensile Strength (min, psi)	1200	D412
Elongation at Break (min, %)	500	D412
Specific Gravity	1.21	D297
Adhesion to Metal (min, lbf/in)	25	D429
Operating Temperature Range for Optimum Service Life	-4°F (-20°C) to 220°F (104°C)	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.
- Cap strip is applied by swabbing mating surfaces of cap strip and lining with toluene. A solution made up of 10-15% cement in toluene can also be used on the cap strip for longer tack time and increase tack during cap strip application.
- **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 lining. **Do not expose tie-gum layer.**