

## TECHNICAL DATA SHEET

1053 Page 1 of 2

# 1053

## GRAPHITIC SEMI-HARD NATURAL

October 1, 2009

**Polycorp 1053** is a Black 95 shore A / 55 shore D graphite semi-hard lining with soft natural rubber tie gum possessing outstanding resistance to wet chlorine, chlorinated brine and chlorine water solution. A-I-E Cure.

### Application Notes:

- **Skive** – use closed skive construction
- **Repair** – Same
- **Cured Durometer** – Shore D Durometer of top surface: 55 ± 10. Shore A Durometer of top surface: 95 ± 5.
- **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 <sup>st</sup> Coat on Metal	C-90 Primer	Chemlok 289
2 <sup>nd</sup> Coat on Metal	C-91 Intermediate	Chemlok 290
3 <sup>rd</sup> Coat on Metal	C-202S Tack	Chemlok 286
4 <sup>th</sup> 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 – 3/16” & 1/4” thickness:

2 1/2 hours @ 260°F/127°C (20 psi). Cool down under pressure.

### Internal Steam Method - 3/16” & 1/4” thickness:

- 5 hours @ 267°F/131°C (25 psi). Cool down under pressure.

### Atmospheric Steam Method - Up to 1/4” thickness:

Minimum 30 hours @ 212°F/100°C. Lower durometer readings may result with this type cure.

### 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

1053 Page 2 of 2

### Typical Properties:

<u>Property</u>	<u>Value</u>	<u>ASTM Test Method</u>
Hardness (Face)	55 D $\pm$ 10	D2240
Tensile Strength (min, psi)	2000	D412
Elongation at Break (min, %)	50%	D412
Specific Gravity	1.32	D927
Adhesion to Metal (min, lbs)	25	D429
Maximum Operating Temperature fro Optimum Service Life	85°C/ 185°F	N/A

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

### PRECAUTIONS:

- This is a hard rubber compound. Overcure will cause brittleness.
- Do not use in transport equipment or tanks to be installed outside.
- This lining may not be suitable for equipment that may be exposed to extremely low temperatures. If temperatures will be below 32 °F/0 °C, contact Polycorp with all the service conditions for a specific recommendation.
- Cool down to 120 °F/49 °C before releasing pressure during pressure cure.
- Do not ship lined tank below 20 °F