

## TECHNICAL DATA SHEET

# 1048

## SEMI-HARD NATURAL RUBBER

July 25, 2011

**Polycorp 1048** A general purpose black 80 A / 30 D semi-hard lining with or without natural rubber tie gum. Excellent chemical and temperature resistance and superior performance in water treatment equipment. FDA compliant as per 21CFR177.2600.

### Application Notes:

- **Skive** – use closed skive construction
- **Repair** – Same or 1038
- **Cured Durometer** – Shore A Durometer of top surface: 80 ± 5. Shore D Durometer of top surface: 30 ± 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:

Slow rise to 250°F/121°C (15 psi). Hold 2 1/2 hours at 250°F/121°C (15 psi). Cool down under pressure.

**Internal Steam Method - 3/16” & 1/4” thickness:** Slow rise to 250°F/121°C (15 psi). Hold 5 hours at 250°F/121°C (15 psi). Cool down under pressure.

**Atmospheric Steam Method - Up to 1/4” thickness:** Minimum 24 hours at 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

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### Typical Properties:

<u>Property</u>	<u>Value</u>	<u>ASTM Test Method</u>
Hardness (Face )	80 A/ 30D $\pm$ 5	D2240
Tensile Strength (min, psi)	1500	D412
Elongation at Break (min,%)	60	D412
Specific Gravity	1.30	D927
Abrasion Resistance, volume loss (mm <sup>3</sup> )	605	D5963
Adhesion to Metal (min, lbs)	25	D429
Maximum Operating Temperature for 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.

Abrasion resistance value provides an abrasion resistance comparison guide for Polycorp rubber lining products only.

### 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