

# 1017

## SEMI-HARD NATURAL RUBBER

March 2015

**Polycorp 1017** is a black general purpose 90A durometer semi-hard lining with excellent chemical and temperature resistance. It provides superior performance in water treatment equipment. Operating temperature range is from 50°F (10°C) to 185°F (85°C).

**APPLICATION NOTES:**

- **Skive** – use closed skive construction
- **Repair** – Same or 1038 semi-hard chemical cure. Refer to section 11 of application manual
- **Cured Durometer:** Shore A Durometer on top surface: 90 ± 10. Shore D Durometer on top surface 45 ± 10.
- **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 – 3/16” & 1/4” thickness:** Slow rise to 250°F/121°C (15psi); hold 250°F/121°C (15psi) for 2 1/2 hours. Cool down under pressure.

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

**Atmospheric Steam Method - Up to 1/4” thickness:** Minimum 24 hours @ 212°F/100°C. Lower durometer readings will result with this type cure.

Coat	Polycorp Adhesive	Approved Equivalent
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

## 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)	90A ± 10	D2240
	45 D ± 10	
Tensile Strength (min, psi)	2000	D412
Elongation at Break (min, %)	8	D412
Specific Gravity	1.29	D297
Adhesion to Metal (min, lbf/in)	25	D429
Operating Temperature Range for Optimum Service Life	50°F (10°C) to 185°F (85°C)	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. Over-cure 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