

# 1000

## TRIFLEX™ 3-LAYER COMBINATIONS

March 2015

**Polycorp 1000** is a general purpose “Triflex™” Soft-Hard-Soft tan natural rubber lining. It is the lining of choice for HCL storage tanks. It provides a combination of excellent abrasion and chemical resistance. Lining is flexible to withstand expansion and contraction due to rapid changes in temperature. It is FDA compliant as per 21CFR177.2600. Operating temperature range is from 50°F (10°C) to 160°F (71°C).

**APPLICATION NOTES:**

- **Skive** – use closed skive construction
- **Repair** – same or chemical cure 1022. Refer to section 11 of Application Manual
- **Cured Durometer** - Shore A Durometer of top surface: 50 ± 10.
- The hardness on the surface may vary depending on thickness and lining method.
- **Spark Test** – Refer to section 13 of the Application Manual
- Do not use in transport equipment
- Do not use on flange faces, use Polycorp 1097 for flange faces.

**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.

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

**CURING:**

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

**Autoclave Cure – 3/16” and ¼” thickness:**

3 hours @ 260°F/127°C (20 psi)

**Internal Steam Cure – 3/16” and ¼” thickness:**

5 hours @ 267°F/131°C (25 psi) or  
 6 hours @ 260°F/127°C (20 psi) or  
 10 hours @ 250°F/121°C (15 psi)

**Internal Steam Method – 3/8” Thickness:**

9 hours @ 267°F/131°C (25 psi) or  
 12 hours @ 260°F/127°C (20 psi) or  
 24 hours @ 250°F/ 121°C (15 psi)

**Atmospheric Steam Method – 3/16” and ¼” thickness:**

Minimum 32 hours @ 212 °F/100°C

**Atmospheric Steam Method – 3/8” thickness:**

Minimum 66 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	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)	50 A ± 10	D2240
Tensile Strength (min, psi)	N/A	D412
Elongation at Break (min, %)	N/A	D412
Specific Gravity	1.027	D297
Adhesion to Metal (min, lbf/in)	25	D429
Operating Temperature Range for Optimum Service Life	50°F (10°C) to 160°F (71°C)	N/A

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