

# T1400

## SOFT NATURAL RUBBER LINING

March 2015

**Polycorp T1400** is a 60A durometer black natural rubber compound which combines excellent physical properties, abrasion resistance, impact resistance and ozone resistance. Design for application in standard flotation systems specifying natural rubber. Operating temperature range is from - 40°F (-40°C) to 159°F (70°C).

### APPLICATION NOTES:

- **Skive** – use open skive construction
- **Repair** – Same or 2019 chemical cure.
- **Cured Durometer** – Shore A Durometer of top surface: 60 ± 5.
- **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.

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 Method** – Up to 1/4” thickness:  
1 hour @ 260°F/127°C (20 psi).

**Autoclave Method** - 1/2” thickness:  
1 1/2 hours @ 260°F/127°C (20 psi).

**Internal Steam Method** – Up to 1/4” thickness:  
3 hours @ 260°F/127°C (20 psi) or  
6 hours @ 240°F/116°C (10 psi).

**Atmospheric Steam Method** – 212°F/100°C  
For up to 1/2” thickness: Minimum 20 hours.  
5/8” to 1” thickness: Minimum 24 hours

## STORAGE:

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

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.

## TYPICAL PROPERTIES:

Property	Value	ASTM Test Method
Hardness (Face )	60 A ± 5	D2240
Tensile Strength (min, psi)	3000	D412
Elongation at Break (min, %)	450	D412
300% Modulus (min,psi)	800	D412
Tear strength, Die C (lb/in)	300	D624
Compression Set (max. %) 22h @ 70°C	25	D395 Method B
Resilience (min)	40	D2632
Ozone Resistance (%) 50 pphm 72 h @ 40°C	80	D1171 Method A
Heat Aging 72h @ 100°C	Tensile -30% max. Elongation -50% max.	D573
Fluid Resistance ( Water) 70h@ 100°C	10% max.	D471
Specific Gravity	1.11	D297
Adhesion to Metal (min, lbs)	25	D429
Operating Temperature Range	- 40°F (-40°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.