

# 2048

## NITRILE RUBBER LINING

March 2015

**Polycorp 2048** is a black, 50A durometer nitrile rubber lining with tie gum for general purpose use when petroleum, aliphatic solvents, animal, vegetable and mineral oils are present. Operating temperature range is from - 20°F (-30°C) to 220°F (105°C).

### APPLICATION NOTES:

- **Skive** – Close
- **Repair** – Same. Refer to section 11 of application manual.
- **Cured Durometer** – Shore A Durometer of top surface: 50 ± 5.
- A heated table to warm the rubber to 110–120°F (43°C) is recommended
- **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 – Up to 1/4” thickness:

2 hours at 275°F/135°C (30psi).

#### Internal Steam Method – Up to 1/4” thickness:

6 hours @ 260°F/127°C (22 psi).

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

Slow rise to 212°F/100°C, hold for minimum 24 hours @ 212°F/100°C.

Coat	Polycorp Adhesive	Approved Equivalent
1 <sup>st</sup> Coat on Metal	C-100 Primer	Chemlok 205
2 <sup>nd</sup> Coat on Metal	C-200 Intermediate	Chemlok 220
3 <sup>rd</sup> Coat on Metal	021052 Tack	021052 Tack
4 <sup>th</sup> Coat on Lining	021052 Tack	021052 Tack

## STORAGE:

Store in a cool and 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	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)	50 A $\pm$ 5	D2240
Tensile Strength (min, psi)	1500	D412
Elongation at Break (min, %)	500	D412
Specific Gravity	1.19	D297
Adhesion to Metal (min, lbs)	25	D429
Operating Temperature Range	- 20°F (-30°C) to 220°F (105°C)	N/A

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

## PRECAUTIONS:

- Calendered stock typically has nerve. Warm stock to 100°F/38°C to 120°F/49°C to preshrink the lining before cutting sheet to size.
- Rubber should be crowded rather than stretched during application.
- Nitrile rubber is susceptible to weather checking. Do not expose rubber lining to sunlight or ozone.