

3014

SEMI-HARD NATURAL RUBBER

March 2015

Polycorp 3014 is a general purpose semi-hard chemical cure repair stock for semi-hard natural rubber. It provides good chemical resistance at elevated temperature. It is FDA compliant as per 21CFR177.2600. Operating temperature range is from 50°F (10°C) to 200°F (93°C)

APPLICATION NOTES:

- **Skive** – use closed skive construction
- **Repair** – Same. Refer to section 11 of application manual.
- **Cured Durometer** – Shore A durometer of top surface: 85 ± 10. Shore D durometer of top surface: 35 ± 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. After application, brush the rubber surface with 3 coats of C-600 activator. Dry 30 minutes between each coat.

Ambient – The chemical cure lining will vulcanize in about three (3) weeks at 75°F/24°C. Lower hardness readings might result from this type of cure.

Atmospheric Steam Assist – Introduce exhaust steam sufficient to insure contact with all surfaces. Approximately 6-8 hours in exhaust team will be required to cure lining. More time may be necessary in a large tank, or if heat losses are large.

Coat	Polycorp Adhesive	Approved Equivalent
1 st Coat on Metal	C-90 Primer	Chemlok 289
2 nd Coat on Metal	C-91 Intermediate	Chemlok 290
3 rd Coat on Metal	C-204S tack	Chemlok 286
4 th Coat on lining	C-204S 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)	85 A/ 35D ± 10	D2240
Tensile Strength (min, psi)	N/A	D412
Elongation at Break (min,%)	N/A	D412
Specific Gravity	1.30	D297
Adhesion to Metal (min, lbs)	25	D429
Operating Temperature Range for Optimum Service Life	50°F (10°C) to 200°F (93°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 curing will cause brittleness.
- 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.
- Freshen cement side of lining with a solution of six parts toluol to one part C-600 by weight.
- To freshen, swab mating surfaces of lining with toluol solvent.
- Do not ship lined tank below 20 °F