

**Permabond® RS-2277 Nitrile Rubber** is a proprietary Nitrile/Natural rubber blend (MOR - Moderate Oil Resistance). The is a polar-type lining used where there may be exposure to aliphatic hydrocarbons in a service condition. With the blend of Natural Rubber has excellent physical properties, such as tensile strength, abrasion resistance, and elongation. RS-2277 is flexible and will expand and contract with thermal variations of the metal substrate. Comes with a bonding layer for added adhesion. FDA compliant as per 21CFR177.2600.

## PHYSICAL PROPERTIES

ASTM TEST	VALUE
Hardness (ASTM D2240)	65 +/- 5 Shore A
Tensile (ASTM D412)	3200 psi (min.)
Elongation (ASTM D412)	550% (min.)
Adhesion (ASTM D429)	25LBS (min.)
Tear (Die C)	450 Lbs/Lin. In.
Service Temperature	170°F max. (76.66°C)
Specific Gravity	1.11

## RESISTANCE TO

MATERIAL	VALUE
Abrasion, Sliding	Good
Abrasion, Impingement	Good
Acid (Diluted)	Good
Acid (Concentrated)	Fair
Salt Solutions	Good
Animal & Vegetable Oils	Fair
Oil & Gasoline	Fair

## ATMOSPHERIC AGING

MATERIAL	VALUE
Low Temperature Flexibility	Good
Moisture Resistance	Excellent
Compression Set	Good
Permeability	Fair

## STANDARD ROLL SIZES

GAUGE	WIDTH	LENGTH	AREA
1/8" (3mm)	4' (1.22m)	131.25' (40m)	525ft <sup>2</sup> (48.77m <sup>2</sup> )
3/16" (4mm)	4' (1.22m)	91.75' (27.96m)	367ft <sup>2</sup> (34.05m <sup>2</sup> )
1/4" (6mm)	4' (1.22m)	62.25' (18.97m)	249ft <sup>2</sup> (23.13m <sup>2</sup> )
3/8" (9mm)	4' (1.22m)	49.25' (15.01m)	197ft <sup>2</sup> (18.30m <sup>2</sup> )
1/2" (12mm)	4' (1.22m)	32.75' (9.98m)	131ft <sup>2</sup> (12.17m <sup>2</sup> )

**Disclaimer:** The above guidelines are based on general industry practices and not applicable to all installations. Application methods should comply with RubberSource application instructions. The data values use is an approximate value and may vary based on individual application methodology and local atmospheric conditions.

## CURE METHOD UP TO 1/4" (6mm)

METHOD	TEMPERATURE
Pressure Cure (Autoclave)	2 Hr @ 275°F (135°C)
Internal Pressure	1 Hr Rise to 275°F (135°C) Hold @ 275°F (135°C) for 6Hrs
Atmospheric	Not Recommended

## ADHESIVE SYSTEM

COAT	ADHESIVE
1st Coat (Primer)	Chemlok 289
2nd Coat (Intermediate)	Chemlok 290
3rd Coat (Tack)	Chemlok 286
4th Coat (Tack)	Chemlok 286

## TYPICAL APPLICATIONS

- Piping
- Storage Vessels
- Thickeners/Clarifiers
- Chutes
- Flotation Cells

## APPLICATION NOTES

1. Make repairs with original lining and follow the specified cure methods.
2. Use Closed Skive for joint construction.
3. Curing times listed are guidelines only.
4. Shelf Life: Stored below 50°F (10°C) = 180 days.
5. Pre-warm rubber on warm table approximately to 120°F (49°C) before use.
6. Contact your account representative for specific technical material and lining methodology recommendation.