

Permobond® RS-4001 Black Natural Rubber has excellent physical properties, like tensile strength, abrasion resistance, and elongation. As well has good resistance to most inorganic chemicals, with the exception of strong oxidizing agents. Resistance to weather (ozone) and water. RS-4001 is flexible and will expand and contract with thermal variations of the metal substrate. Often used in applications such as Phosphoric Acid for it's low permeation physical properties.

PHYSICAL PROPERTIES

ASTM TEST	VALUE
Hardness (ASTM D2240)	60 +/- 5 Shore A
Tensile (ASTM D412)	3800 psi (min.)
Elongation (ASTM D412)	650% (min.)
Adhesion (ASTM D429)	30LBS (min.)
Tear (Die C)	260 Lbs/Lin. In.
Service Temperature	212°F max. (100°C)
Specific Gravity	1.37

RESISTANCE TO

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

ATMOSPHERIC AGING

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

STANDARD ROLL SIZES

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

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
Pressure Cure (Autoclave)	1 Hr @ 275°F (135°C)
Internal Pressure	1 Hr Rise to 250°F (121°C) Hold @ 250°F (121°C) for 2 Hrs
Atmospheric	24 Hrs @ 212°F (100°C)

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. Storage: Store in cool and dry area.
5. Shelf Life: Stored below 50°F (10°C) = 180 days.
6. Contact your account representative for specific technical material and lining methodology recommendation.