

**Permobond® RS-3802 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. RS-3802 is flexible and will expand and contract with thermal variations of the metal substrate.

## **PHYSICAL PROPERTIES**

ASTM TEST	VALUE
Hardness (ASTM D2240)	40 +/- 5 Shore A
Tensile (ASTM D412)	3500 psi (min.)
Elongation (ASTM D412)	700% (min.)
Adhesion (ASTM D429)	30 LBS (min.)
Tear (Die C)	200 Lbs/Lin. In.
Service Temperature	180°F max. (82.22°C)
Specific Gravity	1.02

#### **RESISTANCE TO**

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

# ATMOSPHERIC AGING

MATERIAL	VALUE
Moisture Resistance	Excellent
Compression Set	Good
Permeability	Fair

### **STANDARD ROLL SIZES**

GUAGE	WIDTH	LENGTH	AREA
1/8" (3mm)	4' (1.22m)	131.25′ (40m)	525ft² (48.77m²)
3/16" (4mm)	4' (1.22m)	91.75' (27.96m)	367ft² (34.05m²)
1/4" (6mm)	4' (1.22m)	62.25' (18.97m)	249ft² (23.13m²)
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)	131ft² (12.17m²)

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

METHOD	TEMPERATURE & PRESSURE
Pressure Cure (Autoclave)	1 Hr @ 250°F (121°C)
Internal Pressure	1 Hr Rise to 250°F (121°C) Hold @ 250°F (121°C) for 4 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. Use application procedure for guidance.
- **2.** Make repairs with original lining and follow the specified cure methods.
- 3. Curing times listed are guidelines only.
- 4. Storage: Store in cool and dry area.
- **5.** Shelf Life: Stored below  $50^{\circ}F$  ( $10^{\circ}C$ ) = 180 days.
- **6.** Contact your account representative for specific technical material and lining methodology recommendation.

**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.