# **RS-0545**

Permobond® RS-0545 Black Lead Cure Neoprene® (CR) Rubber The lead content imparts better flame resistance, weather ability and ozone resistance than a typical CR rubber formulation. The permeation resistance of the mineral, vegetable, and animal oils is also better than all other CR linings. RS-0545 has good resistance to paraffinic and naphthenic oils of higher molecular weight but swell extensively in aromatic oils of low molecular weight. With the lead curing package and the addition of higher levels of filler loading we have improved the crosslink giving it exceptional resistance to oils, abrasion, and swelling in aqueous solutions and slurries.

# **PHYSICAL PROPERTIES**

| ASTM TEST              | VALUE                 |
|------------------------|-----------------------|
| Hardness (ASTM D2240)  | 58 +/- 5 Shore A      |
| Tensile (ASTM D412)    | 2500 psi (min.)       |
| Elongation (ASTM D412) | 550% (min.)           |
| Adhesion (ASTM D429)   | 25LBS (min.)          |
| Tear (Die C)           | 229 Lbs/Lin. In.      |
| Service Temperature    | 220°F max. (104.44°C) |
| Specific Gravity       | 1.43                  |

#### **RESISTANCE TO**

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

#### ATMOSPHERIC AGING

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

### 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) | 197ft² (18.30m²) |
| 1/2" (12mm) | 4' (1.22m) | 32.75' (9.98m)  | 131ft² (12.17m²) |

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

| METHOD                    | TEMPERATURE   |
|---------------------------|---|
| Pressure Cure (Autoclave) | 2 Hr @ 250°F (121.1°C)  |
| Internal Pressure         | 1 Hr Rise to 250°F (121°C)<br>Hold @ 250°F (121°C) for 8<br>Hrs |
| Atmospheric               | 24 Hrs @ 212°F (100°C)  |

## **ADHESIVE SYSTEM**

| COAT                    | ADHESIVE                 |
|-------------------------|--------------------------|
| 1st Coat (Primer)       | Chemlok 205              |
| 2nd Coat (Intermediate) | Chemlok 234B, 6224, 6411 |
| 3rd Coat (Tack)         | RS-CR184                 |
| 4th Coat (Tack)         | RS-CR184                 |

## TYPICAL APPLICATIONS

- Piping
- Storage Vessels
- Thickeners/Clarifiers
- Chutes

### **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 approximatly to 120°F (49°C) before use.
- 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.