



## **Uniroyal Permobond® 5501 Material Specification Sheet**

Uniroyal Permobond 5501 (CR - Neoprene) imparts better flame resistance, weather ability, and ozone resistance experienced with diene rubbers. The swelling resistance of the 5501 to mineral, vegetable, and animal oils is also better than the non polar diene-based rubbers. It has good resistance to paraffinic and naphthenic oils of high molecular weight. As well has a proprietary bonding layer for added adhesion.

### **ASTM /Test Requirements**

|                        |                 |
|------------------------|-----------------|
| Hardness (ASTM D2240)  | 55 – 65 Shore A |
| Tensile (ASTM D412)    | 3200 psi min.   |
| Elongation (ASTM D412) | 550% min.       |
| Tear (Die C)           | 320 Lb/Lin. In. |
| Service Temperature    | 220°F max.      |
| Specific Gravity       | 1.39            |

**Available Gauges:** 1/8", 3/16", 1/4", 3/8", 1/2"

### **Adhesive System:**

|   |             |
|---|-------------|
| 1 <sup>st</sup> Coat on Metal           | Chemlok 289 |
| 2 <sup>nd</sup> Coat on Metal           | Chemlok 290 |
| 3 <sup>rd</sup> Coat on Metal           | Chemlok 286 |
| 4 <sup>th</sup> Coat on Metal or Rubber | Chemlok 286 |

### **Resistance to:**

|                         |      |
|-------------------------|------|
| Abrasion, Sliding       | Good |
| Abrasion, Impingement   | Good |
| Salt Solutions          | Good |
|                         |      |
| Acid (Dilute)           | Good |
| Acid (Concentrated)     | Good |
| Animal & Vegetable Oils | Good |
| Oil & Gasoline          | Good |

### **Cure for up to 1/4" Thickness:**

|                           |   |
|---------------------------|---|
| Pressure Cure (Autoclave) | 2 Hrs @ 250°F   |
| Atmospheric Cure          | 1 <sup>st</sup> -6 hrs. from Room Temp to 160°<br>2 <sup>nd</sup> – 24 hrs. @ 180°F |

**Repairs:** Make repairs with original lining material

For Additional Material Recommendations  
Please Contact Rubber Source at  
1-877-660-4440

### **Atmospheric Aging**

|                             |      |
|-----------------------------|------|
| Atmospheric Aging           | Fair |
| Low Temperature Flexibility | Good |
| Compression Set             | Good |
| Permeability                | Fair |

### **Typical Uses**

- Piping & Chutes
- Thickeners & Clarifiers
- Storage Vessels