Many fastening applications in the building and construction industry require waterproof rubber sealers that are reinforced with the durability and rigidity of metal – typically steel or aluminum.

Industry need
Without proper sealing, moisture can degrade the areas around fastened materials. To create single waterproof sealing components, a high-quality bond of rubber to metal is needed. High-speed production processes also include powder coating to protect the final product from extreme weather conditions for its lifetime. DuPont™ THIXON™ 6802 helps ensure quality bonds through high heat and long-duration baking conditions that are commonly found in powder coating processes.

Solution
THIXON™ 6802 offers a unique solution for bonding synthetic rubber blends and is complete with a one-coat system, eliminating an entire application step.
Performance advantages include:
- One-coat application system
- Performance at 1.0 to 4.0 mil (25.4 to 101.6 microns) dry film thickness
- Bonds with low pressure and temperature
- Can be autoclave cured
- Post-bond resistance to high temperatures – up to 450°F
- Spray, brush, or roll applied
- Lead-free formulation

Applications
THIXON™ 6802 successfully bonds metal to:
- Chloroprene
- Ethylene propylene diene monomer (EPDM)
- EPDM/Styrene-butadiene rubber (SBR) blends
- Hydrogenated nitrile rubber (HNBR)
- Nitrile
- Other polymers
- SBR

Construction screws commonly utilize an EPDM washer for weatherproofing of exterior structures. Bonding the EPDM washer to an existing metal washer provides the rigidity needed for a quality end-use product.
DuPont™ THIXON™ rubber-to-substrate adhesives

THIXON™ bonding agents can be customized to accommodate specific requirements of various substrates and conditions. We also offer a full line of low-VOC and HAP-compliant systems to help reduce emissions. THIXON™ performs well in extremely severe environments and is suited for many automotive applications.

Benefits include:
- Elastomer bonding
- Durable bonds
- Multiple molding techniques
- NVH management

Arts, Colors, and Viscosity

<table>
<thead>
<tr>
<th>Color</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity, Brookfield LV#4 @ 100 PRM, 25°C, mPasecs</td>
<td>200 - 600</td>
</tr>
<tr>
<td>Non-volatile solids by weight, %</td>
<td>22 - 26</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>0.948 - 1.056</td>
</tr>
<tr>
<td>Weight per gal</td>
<td>7.9 - 8.8 lbs</td>
</tr>
<tr>
<td>Flash point</td>
<td>39°F (4°C)</td>
</tr>
<tr>
<td>Cure temp range</td>
<td>250 - 400°F (121 - 204°C)</td>
</tr>
<tr>
<td>Suggested film thickness</td>
<td>1.0 - 4.0 mils (25.4 - 101.6 microns)</td>
</tr>
<tr>
<td>Estimated coverage (2.0 mils)</td>
<td>235 ft²/gallon</td>
</tr>
<tr>
<td>Shelf life unopened at 78°F</td>
<td>12 months</td>
</tr>
<tr>
<td>Storage conditions</td>
<td>40-100°F (5-38°C)</td>
</tr>
</tbody>
</table>

About H.M. Royal, Inc.

H.M. Royal, Inc., specializes in supporting the rubber market with high-quality raw materials and specialty chemicals. For over 90 years, H.M. Royal has delivered local dependability and trusted relationships across the United States. For additional information, visit HMRoyal.com.

About DuPont Mobility & Materials

DuPont Mobility & Materials (M&M) delivers a broad range of technology-based products and solutions to the automotive, electronics, industrial, consumer, medical, photovoltaic and telecom markets. DuPont M&M partners with customers to drive innovation by utilizing its expertise and knowledge in polymer and materials science. DuPont M&M works with customers throughout the value chain to enable material systems solutions for demanding applications and environments.

For additional information about DuPont Mobility & Materials, visit https://www.dupont.com/mobility.

Dupont.com/mobility

DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, SM, or M are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted. © 2021 DuPont.