

DuPont™ THIXON™ 6802 one-coat coil-coat bonding system

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:

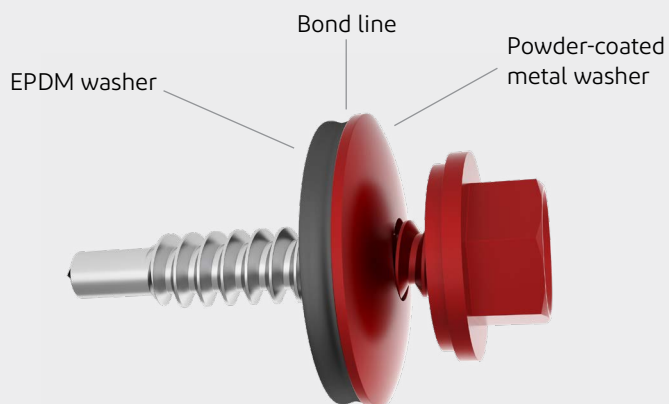
- One-coat application system
- Performance at 1.0 to 4.0 mil (25.4 to 101.6 microns) dry film thickness
- Bonds with low pressure and temperature
- Can be autoclave cured
- Post-bond resistance to high temperatures – up to 450°F
- Spray, brush, or roll applied
- Lead-free formulation

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.



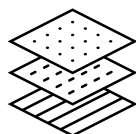
DuPont™ THIXON™ rubber-to-substrate adhesives

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.

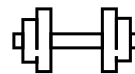
Benefits include:

- Elastomer bonding
- Durable bonds
- Multiple molding techniques
- NVH management

Advantages



Bonds elastomers



Durable bonds



Many molding techniques



Enables NVH management

Typical physical properties

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

Source: DuPont



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.

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