



UNISEAL NVH and BPR products reduce noise and vibration and add rigidity to body panels



Pumpable, sprayable metal reinforcement reduces application time and material

UNISEAL custom-formulated reinforcements add rigidity and flex to body panels while simplifying the production process.

- Improve stiffness of steel and aluminum metal closure panels
- Can be extruded or sprayed with robotic application systems
- Excellent adhesion to "oily" automotive panels
- Outstanding wash-off resistance
- Sag and slump resistant

Hand-applied laminates

UNISEAL also offers UNIBRACE™ Reinforcing Composites, composed of high temperature curing tacky polymer, woven glass fabric and release paper.

They adhere to "oily" aluminum, galvanized and cold-rolled steel without primer.



Typical applications

- Large body panels (roof, hood, deck, door)
- Lift gates
- Floor pans
- Pillars
- Aprons

UNISEAL SOUNSECURE™ sound dampening for an improved ride

UNISEAL's SOUNSECURE™ products are specifically designed to prevent noise, vibration, rust and water entry. They are applied to inner surfaces of automobiles over E-coat and before the painting process.

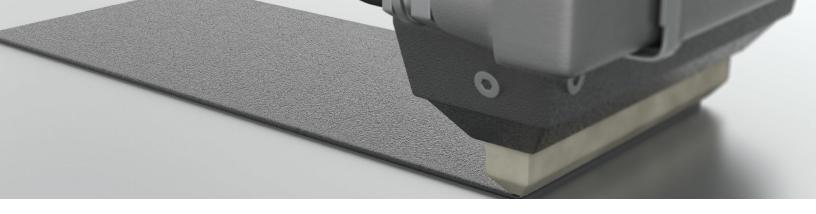
- Provide outstanding noise vibration dampening
- Robotically applied by shovel head or by spray (swirl or multi-stream)
- Sag and slump resistant

- Excellent adhesion to E-coat
- Non-flammable and non-toxic
- Chip resistant

Typical applications

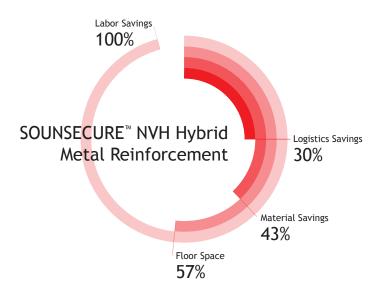
- Trunk interiors
- Body panels
- Rear quarters
- Door panels

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Game changing SOUNSECURE™ Hybrid, single solution for both NVH and BPR

SOUNSECURE™ Hybrid NVH Metal Reinforcement is a single-application material that delivers excellent strength, flex and sound dampening to automotive body panels. It is applied robotically, replacing hand-applied laminates and patches that traditionally have been used to achieve NVH and BPR requirements.



Significant cost reduction in four major areas

Hand-applied options for NVH and BPR are inherently expensive. SOUNSECURE™ Hybrid reduces material costs by an average of 43%. Labor for application is virtually eliminated because it is an automated application. Costs associated with logistics and floor space are reduced by 30% and 57% respectively.

Ideal for thinner metals, eliminates read-through

SOUNSECURE™ Hybrid is formulated for use with thinner gauge metals. With a range of flexural strengths from 50 N to 100 N, it provides the specified strength for your application. The material will not overpower the substrate and cause "body panel read-through".

Early adopters experience immediate benefits

SOUNSECURE™ Hybrid is a proven solution. It was first put into OEM production in November 2014 and is now embraced by progressive automakers because of its immediate benefits in both performance and to the bottom line.

- Reduces noise and vibration
- Increases dent resistance
- Robotically applied to cut time and cost
- Precisely formulated to provide needed strength without "read-through"
- Bites through full range of lubes to prevent shifting before entering bake



Innovative custom solutions to meet your unique challenges

Custom formulations give you greater design and manufacturing freedom. This, combined with unmatched speed-to-market, can lead to achieving true advantages that will take your competition years to reach.

UNISEAL provides a custom solution for every step in your process. By optimizing formulations to specifically fit your product design and manufacturing process, we help you increase throughput and efficiency, along with improved quality ratings.

Innovative developments in polymeric chemistries mean UNISEAL's research and development labs are sparked by the industry's demand for leaner, lighter, more cost efficient and environmentally friendly solutions in a variety of materials, including:



- Silicone
- Acrylic
- ACI yti



Frost & Sullivan Award for Product Leadership



UNISEAL was recently awarded the 2014 North American Frost & Sullivan Award for Product Leadership. The award recognizes UNISEAL's ability to develop need-based

solutions to suit a wide range of automotive and industrial bonding needs.

"UNISEAL has responded to automotive Original Equipment Manufacturers' (OEMs') desires for lighter and safer automobiles with a range of off-the-shelf and customized adhesive and sealant products," says Frost & Sullivan Research Analyst Ankit Mittal. "Although its products are primarily engineered to help bond different combinations of materials, they also address other notable issues such as susceptibility to corrosion factors of different materials and vulnerability to expansion when dissimilar metals come into contact," added Mittal.



UNISEAL is a global supplier of specialty adhesives and sealants. Our products are custom developed to help you quickly tackle your most difficult challenges.