



Application Notes for After-market Application

QuietCar is a new high technology viscoelastic polymer coating to make any vehicle quiet. It's excellent for SUVs, minivans, trucks, sedans, and RVs.

QuietCar excels at sound deadening for high-end audio installations.

Remember high school science? Mats are the "old school" technology – they merely try to mask the noise. QuietCar converts the kinetic (noise) energy into heat. You can theoretically measure it, but it's less than 0.1° Fahrenheit. By absorbing vehicle body vibration, engine and road noise can be reduced by up to 20dB – that's an astonishing 75% of the noise - depending on vehicle and application.

As a viscoelastic polymer designed for noise reduction, it outperforms older coating products such as rubber, asphalt, and elastomer... typically by 2x to 3x.

QuietCar is easily applied on any clean surface by brush, roller, or sprayed on with a spray gun (sold here) for use with air compressors or with an airless paint sprayer. The advanced viscoelastic properties allow the coating to absorb noise and vibration. The more you apply (underside, inside under carpets, wheel wells, engine compartment walls, trunk, inside roof etc.), and the thicker you apply, the more noise and vibration will be absorbed. Lab testing shows this breakthrough technology reduces more noise than mats such as Dynamat®... and is less expensive and less time-consuming to apply.

Applying QuietCar is easy. Be sure to apply under the hood (not on the engine itself), engine compartment side walls, wheel wells, inside the doors, vehicle underbody, trunk etc. You may also apply QuietCar on the inside of the vehicle... under carpets, against the firewall, on the interior roof etc. QuietCar dries as an uneven surface so, while it can be painted, you may wish to be sure that any inside areas that are coated will later be covered with carpeting or other materials.

Audio Installations: QuietCar is very popular when mounting speakers in vehicles (to deaden the unwanted sounds and vibrations) and should be used generously on all the metal components around the speaker and speaker box to reduce noise and vibration and enhance sound quality. For instance, for subwoofer installations in trunks, all carpet and other material must be removed from the trunk. Clean the metal thoroughly with a standard household cleaner such as 409. Then apply QuietCar on every interior surface in the trunk (top, bottom, and sides) and follow the instructions below for waiting between coats. Treatment of the interior of all doors (for speaker mounting) is performed in the same manner.

Surface Preparation: All grease, oil, lubricants, waxes, polishes or other material that can prevent QuietCar from adhering must be removed. Most of these materials

can be removed with water in pressure washing. A simple household cleaner like Formula 409 will remove most oils and grease. Paint does not need to be removed but it must be clean.

Loose dirt, rust or other debris can often be removed by pressure washing. If the cleaning process exposes bare metal, the metal should be primed. The surface must be dry prior to applying QuietCar.

Material Preparation: Do not thin the material.

Drying Time: Being water based, QuietCar needs to dry by evaporation during the cure cycle. QuietCar that has been thinned excessively will take longer to dry. Water will evaporate more readily when the following conditions exist: Elevated temperature, increased air circulation, lowered relative humidity. These conditions along with layer thickness contribute to drying time. Thicker layers require longer drying times. Application of second or successive coats require the previous one to be dry, therefore the goal normally will be to apply as much QuietCar as possible in each coat keeping in mind the effect on drying time. Elevated temperature, used with thick coats will cause the outer surface to dry completely, trapping moisture in the material. This condition is to be avoided as it results in layers which do not cure properly even with extended time.

Typically, apply the first coat and wait 4 hours for it to become tack-free. Then, apply a second coat, and wait 4-hours for it to become tack-free. Then, if you wish, you may apply a third coat. *Thicker application and more coverage greatly enhance the noise and vibration absorption properties.*

Application methods/choices: There are 3 application methods to choose from for application of QuietCar.

Spraying: QuietCar is the most efficient method when irregular surfaces are to be coated. Spraying will require complete protection of any surfaces not to be coated.

When **rolling** QuietCar, a standard paint roller with ½" nap is preferred. Rolling is much more controlled in respect to material over-spray or splattering, therefore much less protective preparation is needed when rolling QuietCar. Rolling is not a preferred method unless absolutely necessary as it will only apply very thin layers. In most cases, 6-8 layers will be necessary instead of 3.

Brushing is the third option for applying QuietCar. While brushing is the most difficult method to control application thickness, it is also the easiest to apply, and most people brush some or all of the vehicle. The surface of the applied material will show brush marks when dry. There is little/no cleanup, as there is no spray equipment. *We recommend brushing for most users unless you buy QuietCar in the spray can or you are an experienced user.*

Spraying Equipment

Airless Sprayers such as Graco and professional Wagner that develop at least 3000 psi work very well. Use a 0.019" tip and keep the siphon hose short (under 3 feet is preferred). Be sure to clean the sprayer within 30 minutes (after last use) or the material will begin to set inside the sprayer.

Air Gun: You will need a special air spray gun that is designed for very high viscosity materials such as QuietCar (sold separately by Serious Materials). You will also need a compressor with at least a 2-gallon tank capable of 90 psi. A 6-gallon or larger air tank would be preferred so the tank doesn't have to recharge (get pumped full of air)

so often. The QuietCar gun comes with a 32 oz. Can attached. Using a large funnel, carefully fill the can with QuietCar (from a 1 gallon or 5 gallon bucket). Then spray until the can is empty and refill as necessary.

SG1 Spray Gun Instructions (optional)

Your spray gun is delivered as a kit that you will assemble.

The kit contains the following items:

- A. Kit 205 Spray gun with can top adapter and dip tube.
- B. A 32 oz. can.
- C. A plastic can top with a protective cover.

Filling the can: When first using the gun fill the can using a large funnel. Fill the can with as much QuietCar as needed leaving approximately one inch of empty space at the top of the can. Press the Plastic top into the can until you feel it lock into place. The plastic top should not come loose when pulled.

Using the Spray Gun: Attach the spray gun to a compressed air line that can supply air at 75 to 100 psi. Screw one of the can top adapters to the tip of the Spray gun. Attach one of the dip tubes to the can top adapter (the square-cut end connects to the adapter). Remove the protective cover from the plastic top. Pull out and discard the seal in the plastic top. Using a screwdriver or other tool, poke a hole in the foil seal large enough for the dip tube. Screw the can assembly to the spray gun. You are now ready to spray.

Damping ability of the material is unaffected by application method.

Some helpful hints

Keep a bucket of warm soapy water handy. Put each plastic part in the water as soon as you finish using it. Wash the parts in warm water to remove all QuietCar material. Do not allow the material to dry in or on the spray gun and its parts. Wipe the tip of the spray gun off with a paper towel dipped in the water. The more care you take in cleaning your spray gun, the longer it will last.

Place the protective cover on the can when not in use to keep the material from drying. While QuietCar is waterproof and not affected by normal weather such as rain and snow, it should not be used in areas of a vehicle or other item that will be submerged under water for long periods of time (in excess of a few hours).

Typical thickness per layer is about 1mm (0.040”), so 3 layers may be 0.100” to 0.120” thick total.

After QuietCar is applied, it will take 24 hours to cure and up to 7 days to obtain its full noise absorption properties (the development time). While you can use the vehicle a few hours after the last coat, the material properties will continue to improve for up to seven days after the final coat is applied.

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