

## HushMat FAQs Click on the questions below to reveal the answers



### Is there a difference of performance between black Ultra & silver Ultra?

The only difference between these two products is color. They perform exactly the same in all specification testing. We apply a black ink to the raw foil to provide the difference in color. Other than the products are identical. Same great performance rated #1 automotive sound & thermal insulation material in independent testing.

### I have a [make/mode/year] vehicle. What do I need to buy to outfit the interior?

HushMat has taken the guess work out of this question through the development of custom vehicle kits. We have over 1900 vehicles measured and now have kits pre-sized to fit each vehicle. Visit our Make, Model & Year look up to see if your vehicle is one of the 1900.

## We own a motorhome and would like to reduce road noise and tire noise while traveling on rough roads. Do you have a product for this?

Yes we do. We have extensive experience in all forms of transportation vehicles including RV's. You will need one specific product – HushMat Ultra to address the noise sources you describe. You must treat the firewall, doghouse, front driver & passenger floor to address the issues of road and tire noise. If it is road noise from the rear tires that concerns you – you will need to cover the back side of the wheel well housing with HushMat Ultra as a starting point.

# I am looking for maximum quietness in my vehicle. Which product and how much would you recommend?

Noise enters the interior of any vehicle in two ways – It is enters through the structure or chassis of the vehicle and all parts connected to it. This is Low Frequency Noise in the range of 0-1000 Hz. This noise source requires vibration damping material aka sound deadening – HushMat Ultra. We recommend for effective reduction of structural transmitted noise to cover 60% of the metal panels surrounding the interior i.e. firewall, floor, roof, doors, truck, rear quarter panels, trunk floor and trunk lid. You would apply Ultra to these panels beginning in the center of the panel and work toward the outer edges again covering at least 60% of the panels surface. The second way noise enters a vehicle interior is from the outside – in through the air. We call this airborne noise. It's sources are road & tire, wind, exhaust drone and engine noise. You can double and triple layer HushMat Ultra but you are not going to address these sources of noise. This is High Frequency Noise > than 1000 Hz frequency. This noise must be absorbed. Silencer Megabond is a blend of synthetic rubbers formulated for optimum sound wave absorption in automotive and marine environments. Silencer Megabond is a semi-closed cell foam that absorbs sound waves up to 4000 Hz frequency. The combination of HushMat Ultra and Silencer Megabond offers you the optimum performance to quiet any vehicle on the road today.

#### Can I get a sample of the product before committing to buying?

We have been in business for over 25 years and have hundreds of retail locations where the HushMat products can be reviewed. Our core competence is and has been in the design, development and manufacture of the #1 Rated automotive sound and thermal insulation materials in the world. If you are having trouble locating a retail location in your area we would be more than willing to discuss any questions that you have regarding HushMat and its materials. We are confident – once you have a vehicle with HushMat treatment – you won't ever have another vehicle without it.

Will the Silencer Megabond foam stand up to direct firewall heat?

HushMat Silencer Megabond foam is rated to 300 degrees F (185 C). Firewalls at peak temperatures will max out below 200 degrees F (129 C). HushMat Ultra – which is always the first step in interior sound and thermal treatment is rated to 550 degrees F (288 C). HushMat Silencer is step two and is adhered directly on top of the HushMat Ultra. This product combination will lower that vehicles surface temperature from 200 F (129C) to 70 F (56 C)

I'm planning on buying HushMat but I don't want to install it myself. Who do you recommend?

We have numerous locations on our dealer locator denoted as "Custom Vehicle Installation Centers". These locations possess skills that are unique to installation of our materials. The installation technicians are proficient in the disassembly and reassembly of vehicle interiors.

I want to quiet down my dishwasher/washing machine, etc. Can I use your product to do this?

HushMat Ultra is used to quiet numerous consumer durable goods – cars, trucks, boats, RV's, dishwashers, laundry equipment, Heating & A/C equipment. IF you have a product that is generating noise and you want to quiet it down – HushMat is the product for you. Visit the Home Appliance section of our web site for more information.

Do you have something to put under the hood? I have a custom paint job and I want to protect it from heat.

HushMat Hoodliner material is specifically manufactured for "Under the Hood" or "Engine Side" applications. HushMat Hoodliner material is robust at 2.0mm thickness and will insulate your vehicles hood (bonnet) from the high engine temperatures. HushMat Hoodliner comes in 12 Square Feet Kits and is universal to every vehicle on the road today. HushMat Hoodliner is also paintable in case your vehicle does not have the fiber cover.

Will HushMat Ultra smell when it gets hot?

Another one of the consumer friendly attributes of HushMat versus other China Mats or Marketing companies products is there is no odor with HushMat. Even when heated up to 300 degrees F. HushMat does not produce any odor. There are no cheap/plastic fillers or asphalt resins that give off these odors in competitive materials. HushMat has virtually no odor. Even in the hottest desert climates HushMat stays hidden!

What do I need to do to prep the surface for application of HushMat products?

The only prep we recommend is lightly dampen a cotton cloth with water (not dripping) and rub over the surface to remove dust or dirt. (WE DO NOT RECOMMEND USING SOLVENTS, ACETONE OR ALCOHOL BASED CLEANERS.) Allow the area to dry to the touch – then peel and stick HushMat. If you need to trim HushMat we recommend laying HushMat sheet down in the vehicle and score the foil for the areas you need to cut. Remove the sheet – cut it with scissors or a box knife and then remove the release paper and install the sheet. The foil allows you clear "Score lines" for efficient cutting and trimming if necessary.

How much of my vehicle to I need to cover in HushMat Ultra to optimally reduce Heat?

The difference between treatments of your vehicle for sound vs heat is the amount of area that you have to cover. With treatment for heat – like with any insulation material – you have to cover 100% of the surface area of the vehicle. Any void – even 5% will allow a majority of the thermal transfer to penetrate the interior of the vehicle. The incredible part is you will get outstanding sound and acoustic benefits from the very same material you are installing for thermal management.

HushMat Ultra's proprietary formula is the adhesive. HushMat's formulation requires no glues or film adhesives like other brands. HushMat Ultra has passed over 25 years of rigorous in-vehicle validation of performance in every climate on the globe. If you slice the Ultra compound you will see that both sides of the slice are tacky. This is one of the competitive advantages of HushMat.

How much time do I have to reposition HushMat Ultra when installing it?

Once you adhere a sheet of HushMat Ultra to a surface you have 2-3 minutes of time to pull the sheet back and re-apply it. After 3 minutes the molecular bond begins and you will have difficulty removing the material. HushMat Ultra is made to stay adhered to your vehicle for its entire useful life. Even in overhead or vertical surfaces in the hottest of climates – HushMat stays bonded to the vehicle.

What is vibration damping or also sometimes referred to as "dampening"?

Damping is the physics that converts vibration energy into heat. The HushMat Ultra is formulated to dissipate (reduce) this energy and absorb it into the material at any temperature below 550 degrees F (288C). This dramatically reduces the vibration energy and the noise that comes from it. Damping is primarily a mass over area physical science and damping materials characteristics are relevant in three primary areas:

Adhesion -

Conformance/Flexibility

Weight/Mass

HushMat is superior in all three areas when compared to the other brands. HushMat provides superior adhesion across the broad temperature spectrum from -30 to 550 degrees F. HushMat is significantly more flexible than competitive brands, even in freezing temperatures, and no heat guns are needed nor special tools to install it. All you need is a pair of hands and a pair of scissors. HushMat is thinner. However it is slightly higher weight per square foot than the closest competitor. HushMat contains no plastic or asphalt fillers, therefore, you do not have to double layer the application. HushMat is also manufactured in the USA!

## What is HushMat?

HushMat is a line of vibration damping (not "dampening"), thermal insulation, sealing and sound absorption materials formulated to eliminate noise caused by noise, engine, structural vibration, and mobile electronic systems. HushMat materials also serve to reduce the thermal transfer from engine, exhaust and local ambient weather into the interior of your automobile. HushMat materials are the easiest materials to apply. Leading installers all over the world have confirmed that HushMat installs in ½ the time versus competing brands. We are convinced that once you try HushMat you won't want anything else in your installations. Simply peel and stick!

What is a dB?

DB stands for decibel. It is the physical measure for sound pressure level (SPL). It is a logarithmic scale. This means a 5 dB SPL reduction requires a 70% reduction in sound power in the noise. A 10dB reduction in SPL requires that the sound power be reduced by a factor of 10! The human ear recognizes a 2-3 dB change in sound pressure.

How can I treat high temperature "hot spots" on my car?

Street rods, hot rods and muscle cars and your daily driver vehicle have significant heat that penetrates through the firewall, tunnel and roof. There are several areas on a vehicle interior that experience above average temperatures. The firewall, the tunnel, near the header, above the exhaust, sun light pounding on the roof to name a few. HushMat Ultra comes in dimensions that offer excellent thermal properties. The 1.5mm & 0.47 pounds per square foot compound blended butyl rubber and foil laminate construction provide an excellent treatment for these difficult application areas.

For extra thermal protection apply ½" Silencer Megabond directly on top of HushMat Ultra on the firewall, tunnel and trunk floor for optimum thermal insulating performance. Apply ½" Silencer Megabond to the back of the headliner for extra insulation from the radiant heat. Call or e-mail us and we can provide you with the best material for these applications. HushMat Ultra is specified to perform at up to 550 degrees F. HushMat Ultra II Hoodliner can also be applied to the engine side of the firewall, hood and front quarter panels.

Where do I apply HushMat Silencer foam?

HushMat Silencer foam should be applied to the following areas:

1/4" back of door trim panels with foam facing outer skin of door

1/2" under carpet adhered to HushMat Ultra on dash and floor,

1/2" or 1/4" under trunk fabric adhered to resin layer of trunk fabric, and rear wheel wells,

1/4" above the headliner adhered to fiber board of headliner,

1/8" on the back of all loose plastic trim or anywhere that plastic and metal rub together and create that annoying squeak and rattle.

My License Plate rattles from the heavy bass from my sub-woofer. What can I do?

HushMat Ultra License Plate Kit (Part # 10600) is designed specifically for this problem. This kit treats all USA Territory License Plates. Simply remove the license plate from your vehicle and place the HushMat Ultra sheet on the back of the plate. Trim it if necessary with a pair of scissors. Place the treated license plate and the HushMat frame (included in every License Plate Kit) back on the vehicle. Your problem is solved every time with HushMat.

What sound reduction can I expect from a HushMat installation?

Our efforts in the North American Automotive Industry have shown dramatic dB reductions. We have reduced interior noise by up to 10 dB. 3-5 dB is readily attained in most installations. We eliminate the structural vibration/engine/road noise so you can experience the pure sound of your vehicle and mobile electronic system. It is not uncommon for a vehicle with complete HushMat surface coverage to achieve up to a 15-20 dB reduction in structural vibration generated noise and road noise.