

# **NVH Dampening Material**

04274

Technical Data February 2020

3M Part Numbers	3M Part Descriptor	
04274	3M™ NVH Dampening Material	

#### **Product Description**

3M™NVH (noise, vibration and harshness) Dampening Material is a heavy bodied two – part urethane primarily used to reduce noise or vibration resulting in unwanted noise associated with metallic assemblies such as automotive bodies. Commonly applied between outer sheet metal skins and inner structure, or inside floor pans as a single sided application. This material may be applied to bare metal and welded through with squeeze type resistance spot welding equipment (prior to work time expiration).

#### **Features**

- Designed for professional aftermarket collision repair use
- Replaces OEM NVH Material
- 60-minute Work Time
- Direct to Metal Application

#### **Typical Physical Properties**

NOTE: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Container	200mL Duo S	200mL Duo Syringe Cartridge	
Base	Urethane	Curative	
Color	Black	Amber	
Flash Point	290°F	290°F (143°C)	
Solids Content (Approx.)	9	98%	
Consistency	Viscous p	Viscous paste (mixed)	
Service Temperature	-20°F to 180°F	-20°F to 180°F (-20°C to 82°C)	

## Typical Performance Properties

The following times have been determined with ambient air temperature and substrate temperature @ 73°F (23°C) and are considered typical values.

**WORK TIME:** 

60 minutes

**CLAMP TIME:** 

N/A

**CURE TIME:** 

24 hours

1 hour @ 160°F

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#### **Product Uses**

Generally used between automotive body panel skins and inner structure members such as, door skin/intrusion beam. 3M<sup>™</sup> NVH Dampening Material may also be used as a sealant when weld sealing is desired using STRSW equipment. 3M<sup>™</sup> NVH Dampening Material may be applied to properly prepared bare metal or primer/E-coat/paint coated surfaces. 3M<sup>™</sup> NVH Dampening Material may be painted with automotive type coatings.

Use with the following accessories:

- 3M<sup>™</sup> Manual Applicator (PN 08571 or PN 08117)
- 3M<sup>™</sup> Pneumatic Applicator (PN 09930)
- 3M<sup>™</sup> Static Mix Nozzle (PN 08193, 6-bag)
- 3M<sup>™</sup> Static Mix Nozzle (PN 08194, 50-box)

For Industrial/Occupational Use Only. Not for Consumer Sale or Use.

#### **Performance Properties**

The following times have been determined with ambient air temperature and substrate temperature @ 73°F (23°C) and are considered typical values.

**WORK TIME:** 

60 minutes

**CLAMP TIME:** 

N/A

**SAND TIME:** 

N/A

**CURE TIME:** 

24 hours

#### **Directions for Use**

#### CARTRIDGE PREPARATION

- Insert the cartridge into the applicator and remove the collar and plug. Discard a small amount of material to a disposable surface and reinstall the nozzle and collar.
- 2. Dispense a small amount of material through the mixing nozzle on to a disposable surface, preparation is now complete.

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#### Directions for Use, cont.

#### WELD THROUGH

NOTE: For weld through operations (prior to welding the panel(s) make test welds on scrap parts to assure proper welding machine settings).

- 1. Remove surface contamination on all sides of weld flanges using an abrasive (bare metal must be exposed).
- 2. Apply NVH material to all bare metal between weld flanges (brush or spread to cover all bare metal).
- 3. Apply a ¼ inch (6mm) bead to one side of the joint to ensure "squeeze out".
- 4. Mate parts together and clamp in place.
- 5. Be sure to use a shunt clamp and start welds near the clamp.
- 6. Begin squeeze type resistance spot welding process immediately and complete prior to work time expiration.

#### TRUNK FLOOR (LASD REPLACMENT) OR SOUND DEADENING PAD

- 1. Remove all lose/damaged original material.
- 2. Blow off and clean the surface with a VOC compliant surface cleaner to ensure proper adhesion.
- 3. If required mask the outline of the original application to produce a good quality appearance of the repair.
- Apply the NVH material to the prepared area tool as necessary using a spreader, or notched spreader to match the original appearance.
- 5. Remove the masking tape and allow to cure for 24 hours before placing into service.

#### STANDARD SOUND DEADENER APPLICATION

- 1. When possible keep OEM NVH material in place to maintain proper spacing between panel structure and skin.
- Apply NVH material to previous OEM locations prior to final installation of outer sheet metal, consider the 60-minute working time of. (Note) 3M™ NVH Dampening Material during your repair planning prior to application.

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#### **Applications**

Sound deadening and vibration reduction material for sheet metal application such as automotive body repairs, such as door skins to intrusion beam, trunk floors, roof bow to skin.

#### Storage and Handling

Store at room temperature. Rotate stock on a "first-in-first-out" basis. When stored at the recommended conditions in original, unopened containers, this product has a shelf life of 12 months. Use in a well-ventilated area.

#### **Precautionary Information**

Before using this product, please reference Product Label and/or Safety Data Sheet for Health and Safety Information. Note: Laws controlling the acceptable amounts of Volatile Organic Compounds (VOCs) vary by state, and in some cases by locality. For surface preparation and clean-up activities, consult federal, state and local regulations regarding use of products containing VOCs in your area.

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