

180 **2(**

220

7)*

240

260

28(

160

1/

3M Automotive

Design and build with confidence

With a network spanning 65 countries, 3M is a true global partner to automotive OEMs and tier suppliers, offering solutions, services, support and manufacturing capabilities at the local level.

Wherever cars are made, 3M is there to help.

Design and build with confidence

You and your customers have strong preferences and strict expectations. 3M works with you to help ensure that you can meet your goals. Whatever you want to achieve in design, manufacturing and assembly - NVH reduction, lightweighting, styling and comfort, or process improvement - we can help. 3M has over 100 years of experience and more than 1,000 products to help you stay ahead of the competition.



Acoustic Insulation Lightweight, highperformance acoustic absorber



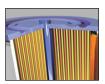
Adhesives Broad portfolio formulated for wide range of substrates and conditions



Attachment Tapes High-performance, double-sided, pressure sensitive and heat activated tapes



Auto Glass Films Films for laminated glass and aftermarket windows to reduce heat and UV without electronic signal interference



Battery Cell Materials Materials portfolio to enable smaller, safer, longer lasting hybrid and electric vehicles



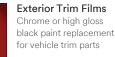
Display Solutions Films to manage reflections, manipulate light distribution and increase display brightness

















Friction Friction enhancing solutions for joining components to transmit higher forces and torques

Wide range of high

Glass Bubbles Lightweight, cost effective, high-strength, low density additive











Paint Replacement Film

Film alternative for blackout appearance around automotive side glass

"We have a solution for every phase of the vehicle design and assembly process."















Structural Bonding Tapes and Adhesives Epoxy film adhesive for bonding, stiffening or corrosion protection of metals

Tape Attached Hardware Components with pre-

applied pressure sensitive or heat curable tapes

Thermal and Emission **Control Materials** Mat Mount and insulation products for pollution control systems

Thermal Interface Materials

Efficient heat transfer and cushioning for long-term reliability and performance optimization

Thermal Management Fluids

Non-flammable direct contact cooling fluids with high dielectric constant

Thin Bonding Tapes

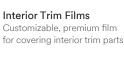
Extensive portfolio of adhesive transfer and double coated tapes for bonding a wide range of substrates

Wheel Weights

Lead-free wheel balancing







Light String Highly flexible light guide with superior uniformity and

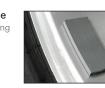
temperature durability Performance Label Materials

Comprehensive portfolio of adhesives, topcoats, facestocks and liners

Optically Clear Adhesive Very durable, clear, laminating adhesive with high heat, UV and humidity resistance

Paint Protection Film Virtually invisible film to protect vulnerable vehicle surfaces





Exterior

- (1) 3M[™] Acrylic Foam Tape for <u>exterior trim attachment</u> Moldings, sensor brackets, B pillar appliqué
- 3M[™] Acrylic Foam Tape for Sealing and Weatherstrip Body, door, trunk and deck lid seals
- 3 <u>3M[™] Auto Glass Film</u> Side and rear glass

④ 3M[™] Die-Cuttable Acrylic Foam Tapes

Nameplate attachment

- 5 3M[™] Exterior Trim Film Belt line moldings
- 6 3M[™] Glass Bubbles in Plastic Parts Sheet molded composite panels, hood, trunk lid, engine cover
- Omega 2017Omega 2017Seam sealers, underbody coatings
- 3M[™] Paint Protection Film Hood, bumper, trunk ledge, rocker panels
- ③ <u>3M[™] Paint Replacement Film</u> Door pillars, sashes and moldings
- (1) 3M[™] Structural Bonding Tape Roof ditch molding clips
- (1) 3M[™] Wheel Weights Lead-free wheel balancing
- Tape-Attached Hardware Mirror buttons, sensor brackets, locator pins



Chassis/Powertrain

 3M[™] Battery Cell Materials Anode powders, coated current collectors and electrolyte additives
 3M[™] Dyneon[™] Fluorothermoplastic

Fuel hoses

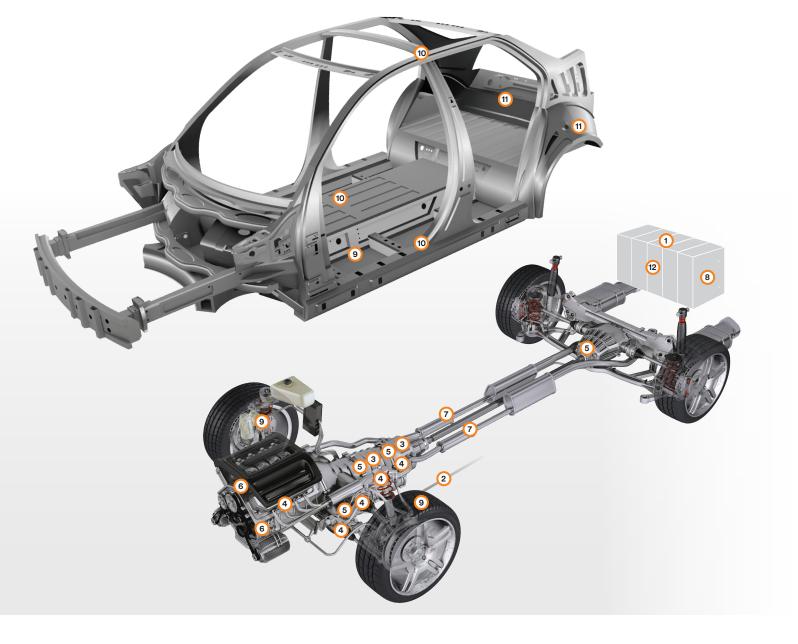
- 3M[™] Dyneon[™] Fluorelastomer Powertrain and transmission seals, hoses and o-rings
- 3M[™] Dyneon[™] PTFE Engine, transmission, steering and shock absorber seals

- (5) 3M[™] Fastener Adhesives Adhesive pre-applied to threaded fasteners
- 6 <u>3M™ Friction Shims</u> Crankshaft, camshaft, and balancer shaft
- O 3M[™] Interam[™] Mat Mount and Insulation Gasoline and diesel engines
- 8 3M[™] Novec[™] Engineered Fluids Direct contact battery cooling fluid

③ 3M[™] Performance Label Material

Brake system, body and tire

- OBM[™] Structural Adhesives Hem flange, roof bow brackets, isolator
- (1) **3M[™] Thinsulate[™] Acoustic Insulation** Fender liner, doors
- (2) 3M[™] Thermal Interface Materials Hybrid, plug-in hybrid and electric vehicle batteries



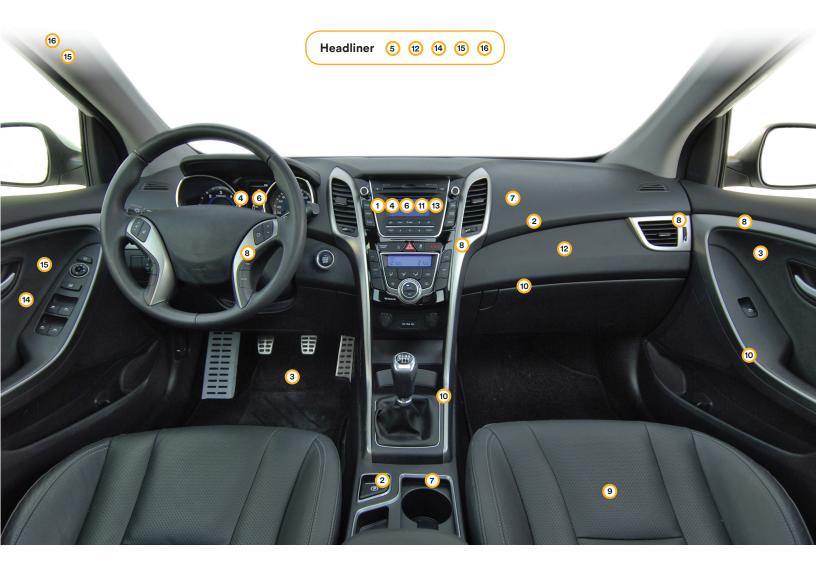
Interior

- (1) <u>3M[™] Boron Nitride Cooling Fillers</u> Heat dissipation and transfer for plastic display housings
- ② 3M[™] Bumpon[™] Protective Products Glove box, center console, electronic spacer
- 3 3M[™] Damping Foil Tapes Doors, hoods, deck lids
- (4) <u>3M[™] Display Enhancement Films</u> Cluster, center stack
- (5) 3M[™] Dual-Lock[™] Reclosable Fasteners Headliner, sunroof ring, closeout

panels

- 6 3M[™] EMI/EMC Electronic Materials Sensitive electronics and communications, wireless charging
- 7 3M[™] Glass Bubbles Center console, instrument panel, inner door panels
- B 3M[™] Interior Trim Film Door and instrument panel trim
- 3M[™] Laminating Adhesive
 Low fogging adhesives (seats, headliner)
- 3M[™] Light String
 Doors, instrument panel, headliner
- (1) 3M[™] Optically Clear Adhesive Displays, touch panels

- (2) 3M[™] Performance Label Materials Warning and security labels
- 3M[™] Thermal Interface Materials Heat dissipation
- (4) 3M[™] Thin Bonding Tapes
 - Trim and fabric attachment, buzz squeak rattle, headliner
- (5) 3M[™] Thinsulate[™] Acoustic Insulation Headliner, package tray,
- instrument panel, pillars, doors **3M[™] Wire Harness Tapes**
 - Headliner, pillars



Meet your goals

	Weight Reduction	Passenger Comfort	Quality and Process Improvement	Design Flexibility	Automotive Electrification	NVH Reduction	Powertrain Innovation	Styling and Personalization
Solutions								
Acoustic Insulation	•	•	•	•		•		
Adhesives	•		•	•		•		
Auto Glass Films		•						•
Automotive Attachment Tapes	•		•	•		•		•
Battery Materials	•				•		•	
Bumpons						•		
Display Solutions		•		•	•			•
EMI/EMC Electronic Materials		•		•	•			
Exterior Trim Films	•		•					•
Fastening	•			•		•		
Fluoropolymers							•	
Friction Shims							•	
Glass Bubbles	•		•		•			
Interior Trim Films				•				•
Label Materials			•		•			
Light String			•	•				•
Optically Clear Adhesive		•		•	•			•
Paint Protection Film			•					•
Paint Replacement Film			•	•				•
Structural Bonding Tapes and Adhesives	•		•	•				
Tape Attached Hardware			•	•	•			•
Thermal and Emission Control Systems							•	
Thermal Interface Solutions				•	•		•	
Thermal Management							•	
Thin Bonding Tapes	•	•	•	•	•	•	•	•
Wheel Weights		•	•					

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