



Automotive and Transportation
Solutions



SPECIALTY THERMOPLASTICS FOR VEHICLE EXTERIOR DESIGN

Smart science drives lightweight durability innovation

DESIGN FOR LIGHTWEIGHT FUNCTIONAL DURABILITY



Enhance comfort with improved acoustic performance and cabin protection, aid energy efficiency with lightweight materials, and increase styling options with durable body components. Specialty automotive thermoplastic elastomers (TPEs) from Multibase, a subsidiary of The Dow Chemical Company, are proven, effective solutions for exterior trim, styling components, glass encapsulation and weatherseals.

Advanced TPE technologies from Multibase, especially when enhanced with silicones, are engineered to provide high-value, cost-effective answers for long-lasting comfort, performance and visual appeal. You can rely on our specialty thermoplastics for vehicle exterior design to help ensure:

- Increased acoustic comfort; reduced wind noise, water leaks, and unwanted squeaks and rattles
- Design versatility with a range of material types, hardness and lightweight density
- Enhanced aesthetic appeal with excellent resistance to UV light, weathering, scratch and abrasion
- Flexible, cost-efficient processing with high flowability

INNOVATE WITH SMART SCIENCE

Advanced automotive thermoplastics from Multibase can help you meet vehicle exterior design needs for lightweight durability innovation:

Reduce mass without compromising durability

- Body trims
- Bumper lips
- Active grille shutters
- Air deflectors, spoilers
- Acoustic/dust barriers
- Body plugs and grommets

Prevent wind noise and water leaks

- Quarter window glass encapsulation
- Window/door weatherseals
- Hood, cowl and trunk seals
- Beltline, cutline, roofline seals
- Pillar trims, seals





TPE SELECTION GUIDE: VEHICLE EXTERIOR APPLICATIONS

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on these products.

MULTIFLEX® BRAND PRODUCT	ENGINEERING PROPERTIES			POTENTIAL APPLICATIONS	SPECIAL CHARACTERISTICS
	Type	Shore Hardness	Density, g/cm ³		
G Series					
GT 25 A 510	Semi-dynamic	25A	1.04	HVAC seals, motor holder	Standard TPE polymers: <ul style="list-style-type: none"> • Proven effective in a range of applications • Widely approved by OEMs • Available in multiple Shore A hardnesses • Good mechanical properties
G 40 A BT		40A	1.12		
G 45 A		45A	1.17		
G 60 A 520	Static	60A	1.18	Cowl, fender, hood seals	
G 62 A 21		62A	1.17	Active grille shutters, HVAC seals	
G 70 A 21 BT	Semi-dynamic	70A	1.12	Pillar trim, beltline seals	
G 75 A 21	Static	75A	1.20	Active grille shutters	
G 75 A 520		75A	1.15	Cowl, fender, hood seals	
G 85 A 21		85A	1.16	Active grille shutters	
G 85 A 550		85A	1.02	Roofline seals, bumper lips	
G 90 A 11		90A	1.12		
G 90 A 520		90A	1.13		
TES Series					
TES A5009 LC0	Semi-dynamic	50A	0.99	Window/sunroof glazing, exterior trim	Enhanced TPE polymers: <ul style="list-style-type: none"> • Lightweight, low-density materials • Good mechanical properties • Enhanced aging resistance • Efficient processing with good flowability
TES A6009 EVO		60A	0.99	Glass encapsulation, exterior trim, body seals	
TES A6221 CUV	Static	60A	1.15	Exterior trim, body seals	
TES A6509 EVO		68A	0.91	Glass encapsulation, exterior trim, body seals	
TES A6509 SU1		68A	0.99	Window/sunroof glazing, exterior trim	
TES A7510 EVO		75A	0.99	Glass encapsulation, exterior trim, body seals	
TES A8506 SV1		85A	1.15	Exterior trim, body seals, bumper lips, air deflectors	
TES A9008 EVO		90A	0.99		
Silicone-Enhanced TES					
TES A6012 EVO	Static	63A	0.99	Glass encapsulation, exterior trim, glazing seals, body seals	Premium TPE polymers with silicone additives: <ul style="list-style-type: none"> • Resist scratching, marring and abrasion • Improve aesthetics and tactile feel • Reduce noise with low CoF • Increase resistance to UV, heat and cold
TES A7512 EVO		75A	0.99		
TES A9012 E		90A	0.99	Exterior trim, body seals, bumper lips	
Specialties					
A1004 B	Static	65A	1.03	Exterior trim	• Adhesion on PC/ABS
A1004 65A		65A	1.03		
TPO D 5005	Slip coating	50D	0.92	Slip coating	• Low CoF/slip coating

NOTE: These are proven, effective *Multiflex*® brand thermoplastic elastomer solutions for vehicle exterior systems design. Contact your Dow Corning technical service representative for other product options and customized solutions to meet specialized requirements.



SUSTAINABLE DESIGN SOLUTIONS

Enhance your design sustainability with our specialty automotive thermoplastics. Easily integrated into today's designs for lightweight structural durability, advanced TPE material technologies from Multibase offer exceptional manufacturing flexibility, excellent flow characteristics and strong bonding to most technical polymers. They can be injection-molded, over-molded, extruded or blow-molded.

TPE SOLUTIONS FOR OTHER VEHICLE SYSTEMS

In addition to the thermoplastic elastomers for vehicle exterior systems featured in this selection guide, Dow Corning also offers specialty automotive TPEs for these vehicle systems:

- Interior
- Safety

LEARN MORE: CONTACT US

To learn more about our specialty automotive TPEs to meet challenging requirements for lightweight structural innovation in vehicle exterior design, contact your Dow Corning Technical Representative, visit dowcorning.com/auto or send an email via [dowcorning.com/ContactUs](mailto:mailto:dowcorning.com/ContactUs).

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