

TPV
Automotive Material Approvals

Mitsubishi Chemical Performance Polymers has been a leader in supplying custom material solutions into the Automotive Industry for over 30 years. These materials include, but are not limited to PVC, TPV, and TPE. MCPP has worked hard to support the Automotive Industry by maintaining a lead specification position with various OEMS. Below you will see the current approvals associated with **TREXPENE™** which is a fully vulcanized thermoplastic elastomer (TPV) based on an EPDM/PP blend. **TREXPENE™** can be used in a variety of automotive applications including under the hood, interior, exterior and sealing system components.

Ford Motor Company:

Specification	TREXPENE™	Hardness	Application
WSS-M2D379-B1	A64BW	Shore 64A	Standard Weatherable Black for exterior applications
WSD-M2D378-A1	A55BU & A55NU	Shore 55A	Standard Black & Natural for under hood applications
WSD-M2D379-A1	A64BU & A64NU	Shore 64A	Standard Black & Natural for under hood applications
WSD-M2D380-A1	A74BU & A74NU	Shore 74A	Standard Black & Natural for under hood applications
WSD-M2D381-A1	A80BU & A80NU	Shore 80A	Standard Black & Natural for under hood applications
WSD-M2D382-A1	A88BU & A88NU	Shore 88A	Standard Black & Natural for under hood applications
WSS-M2D381-A4	A80BI-PV/ NI / CI	Shore 80A -HF	Standard Black, Natural & Colors for interior applications
WSD-M2D378-A2 WSS-M2D510-A5	A55CI / A55CI-HF	Shore 55A	Standard Black, Natural & Colors for interior UV applications
WSD-M2D379-A2 WSS-M2D510-A6	A70SCI, A64CI, A64BI / NI / CI	Shore 64A	Standard Black, Natural & Colors for interior UV applications
WSD-M2D380-A2 WSS-M2D510-A7	A74BI / NI / CI	Shore 74A	Standard Black, Natural & Colors for interior UV applications

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WSD-M2D381-A2 WSS-M2D510-A8	A80BI / NI / CI	Shore 80A	Standard Black, Natural & Colors for interior UV applications
WSD-M2D382-A2 WSS-M2D510-A9	A88BI / NI / CI	Shore 88A	Standard Black, Natural & Colors for interior UV applications
WSD-M2D378-B1	A55BW/CW	Shore 55A	Standard Black or Color for exterior applications
WSD-M2D381-B1	A80CW	Shore 84A	Color for exterior UV applications

General Motors Approvals:

Specification	TREXPENE™	Hardness	Application
APPLICATION: Under the Hood			
GMW15813 Type 4 / GMP.E/P.001	A55BU & A55NU	Shore 55A	Standard Black & Natural for under hood applications
GMW15813 Type 5 / GMP.E/P.002	A64BU & A64NU	Shore 64A	Standard Black & Natural for under hood applications
GMW15813 Type 6 / GMP.E/P.003	A74BU & A74NU	Shore 74A	Standard Black & Natural for under hood applications
GMW15813 Type 7 / GMP.E/P.004	A80BU & A80NU	Shore 80A	Standard Black & Natural for under hood applications
GMW15813 Type 8 / GMP.E/P.005	A88BU & A88NU	Shore 88A	Standard Black & Natural for under hood applications
GMW15813 Type 9 / GMP.E/P.006	D40BU & D40NU	Shore 40D	Standard Black & Natural for under hood applications

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Specification	TREXPREENE™	Hardness	Application
GMW15813 Type 10 / GMP.E/P.007	D50BU & D50NU	Shore 50D	Standard Black & Natural for under hood applications
APPLICATION: Exterior			
GMW15812 Type 4 / GMP.E/P.078	A55BW & A55CW	Shore 55A	UV stable Black & Colors for exterior applications
GMW15812 Type 5 / GMP.E/P.029	A67BW & A67NW	Shore 67A	UV stable Black & Colors for exterior applications
GMW15812 Type 6	A74BW & A74CW	Shore 74A	UV stable Black & Colors for exterior applications
GMW15812 Type 7 / GMP.E/P.120	A80BW & A80CW	Shore 80A	UV stable Black & Colors for exterior applications
GMW15812 Type 8 / GMP.E/P.037	A88BW	Shore 88A	UV stable Black & Colors for exterior applications
GMW15812 Type 9	D40BW & D40CW	Shore 40D	UV stable Black & Colors for exterior applications
GMW15812 Type 10 / GMP.E/P.016	D50BW& D50CW	Shore 50D	UV stable Black & Colors for exterior applications
APPLICATION: Interior			
GMW15816 Type 4 / GMP.E/P.071	A55CI & A55NI	Shore 55A	Black, Naturals & UV stable Colors for interior applications
GMW15816 Type 5 / GMP.E/P.082	A65SCI / A64CI/ A64NI	Shore 64A	Black, Naturals & UV stable Colors for interior applications
GMW15816 Type 5	A65SCI-HF/ A65SNI-HF	Shore 65A	High Flow Colors and Natural for interior applications
GMW15816 Type 6 / GMP.E/P.117	A70CI-HF	Shore 70A	Black, Naturals & UV stable Colors for interior applications
GMW15816 Type 6 / GMP.E/P.044	A74CI/ A74NI/	Shore 73A	Black, Naturals & UV stable Colors for interior applications

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Specification	TREXPENE™	Hardness	Application
	A74SCI		
GMW15816 Type 7	A80 CI & A80 NI	Shore 80A	Black, Naturals & UV stable Colors for interior applications
GMW15816 Type 8 / GMP.E/P.067	A88CI & A88NI	Shore 88A	Black, Naturals & UV stable Colors for interior applications
GMW 15816 Type 9	D40CI	Shore 40D	UV stable Colors for interior applications
GMW 15702- (line callout)	A45BW/CW	Shore 45A	Black, & UV stable Colors for exterior applications
GMW 15702- (line callout)	A88SCI	Shore 88A	UV stable Colors for interior applications
GMW 15702- (line callout)	A45SBW/SCW	Shore 45A	Black, & UV stable Colors for exterior applications

FCA:

Specification	TREXPENE™	Hardness	Application
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Specification	TREXPREENE™	Hardness	Application
MS-AR -20A / 100AGN	A55BU & A55NU	Shore 55A	Standard Black & Natural for under hood applications
MS-AR- 20B / 100BGN	A64BU & A64NU	Shore 64A	Standard Black & Natural for under hood applications
MS-AR -20C / 100CGN	A74BU & A74NU	Shore 74A	Standard Black & Natural for under hood applications
MS-AR -20D / 100DGN	A80BU & A80NU	Shore 80A	Standard Black & Natural for under hood applications
MS-AR -30A + line callout Extending approval	D40BU & D40NU	Shore 40D	Standard Black & Natural for under hood applications
MS-AR-100 AGV	A55BW	Shore 55A	UV Stable Black for Exterior applications
MS – AR 100 BGV	A67BW	Shore 67A	UV Stable Black for Exterior applications
MS – AR 100 CGV	A74BW	Shore 74A	UV Stable Black for Exterior applications
MS – AR 100 FGV	A45BW	Shore 45A	UV Stable Black for Exterior applications
MS-AR-100 HGV	D50BW	Shore 50D	UV Stable Black for Exterior applications
MS-DB 226 (CPN 4725)	A80CI-HF	Shore 80A	Naturals & UV stable Colors for interior applications
MS-DB 226 (CPN 4580/AR26B)	A64BI/NI/CI	Shore 64A	Naturals & UV stable Colors for interior applications
MS-DB 226 (CPN 4676)	A55CI/CI HF	Shore 55A	Naturals & UV stable Colors for interior applications
MS-DB 226 (CPN 4662)	A74CI/CI-HF	Shore 74A	Naturals & UV stable Colors for interior applications
MS-DB 226 (CPN 4902) Extending approval	A45BU/CI	Shore 45A	Naturals & UV stable Colors for interior applications
MS-DB 226 (CPN 4787) Extending approval	A88SCI-HF	Shore 88A	Naturals & UV stable Colors for interior applications
MS-AR 100 AMV2	A55CI/NI/SCI/SNI	Shore 55A	Naturals & UV stable Colors for

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Specification	TREXPENE™	Hardness	Application
			interior applications
MS – AR 100 AMV2-HF	A55SNI-HF	Shore 55A	Naturals & UV stable Colors for interior applications
MS-AR 100 BMV2	A64CI/NI/SCI/SNI	Shore 64A	Naturals & UV stable Colors for interior applications
MS-AR 100 BMV2-HF	A64CI/NI/SCI/SNI-HF	Shore 64A	Naturals & UV stable Colors for interior applications
MS-AR-100 CMV2	A74CI/NI/SCI/SNI	Shore 74A	Naturals & UV stable Colors for interior applications
MS-AR-100 CMV2-HF	A74CI/NI/SCI/SNI-HF	Shore 74A	Naturals & UV stable Colors for interior applications
MS-AR-100 EMV2-HF	A80CI/NI/SCI/SNI-HF	Shore 80A	Naturals & UV stable Colors for interior applications
MS-AR-100 FMV2-VHF	A88CI/NI/SCI/SNI-VHF	Shore 88A	Naturals & UV stable Colors for interior applications

Inteva (formerly Delphi):

Specification	TREXPENE™	Hardness	Application
DX300001	D50BU & D50NU	Shore 50D	Standard Black & Natural primarily for under hood applications
DX300367	A55BU & A55NU	Shore 55A	Standard Black & Natural primarily for under hood applications

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Toyota Motor Company:

Specification	TREXPENE™	Hardness	Application
TSM 5529 Class 2B Application	A70CI / A74CI	Shore 70-74A	Pre-Colored or Black Interior parts with UV, cup holders, bin mats – pre-colored
TSM 5529 Class 2B Application	A70SCI	Shore 70-74A	Pre-Colored or Black Interior parts with Anti-wear / Slip package for high durability

Nissan Motor Company:

Specification	TREXPENE™	Hardness	Application
Nissan Part # 02001 LH / 02002 RH	A80BW	Shore 80A	UV Stable Black for Exterior & Under the hood applications
Nissan Part# 4101 LH / 4102 RH	D40BU	Shore 40D	Standard Black for Exterior & Under the hood applications

Mitsubishi Motor Company:

Specification	TREXPENE™	Hardness	Application
Mitsubishi Part # MR991091/92	D40BU	Shore 40D	Standard Black for Exterior & Under the hood applications

Other Automotive OEM's such as Nissan, Honda, Mazda, Kia, Hyundai and VW have specifications for "soft materials" but do not have a formal system for approvals.

Please contact jeff_davis@m-chem.com, derrek_greenberg@m-chem.com, joshua_olah@m-chem.com, or brian_gumbko@m-chem.com for a **TREXPENE™** grade recommendation or other needed information.



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