

## Vistalon 4600 EPDM (U.S. Market)

Vistalon 4600 has been designed for a unique balance of:

- Cold green strength
- Low temperature compression set
- Excellent heat aging

Vistalon 4600 is a terpolymer of high molecular weight, moderate ethylene content and medium diene level. It is produced with ExxonMobil Chemical's proprietary bimodal molecular weight distribution technology.

**High green strength for:**

- Shape retention during reinforcement
- Good collapse resistance
- Good extruder feed

**Amorphous EPDM for:**

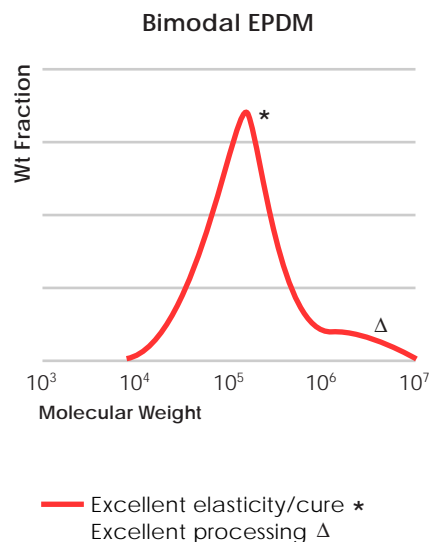
- Cold flexibility (-30°C)
- Improved clamp sealing
- Improved compression set

**Typical Properties:**

- [Vistalon Grade Slate–Typical Properties](#)

**Advantages of bimodal molecular weight distribution:**

- Higher mixing efficiency
- Improved dispersion of ingredients
- Faster compound extrusion rates
- Lower compound viscosity achievable at high shear
- More consistent geometry control



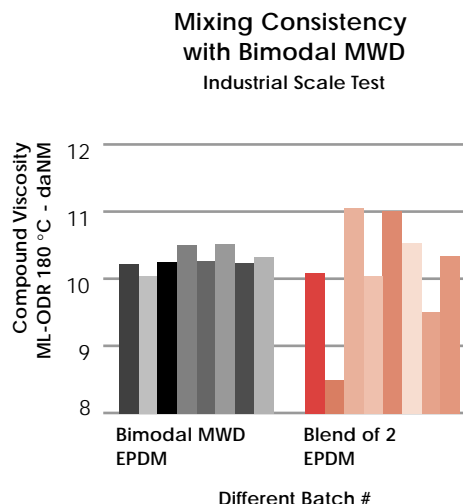
### Reduced inventory

Vistalon 4600 can eliminate the need to blend different EPDMs. Polymer blending is a source of higher standard deviation in compound properties.

**Eliminating blending allows for:**

- Material inventory savings
- Reduced risk of batch preparation errors
- Superior mixing consistency

The use of a single EPDM grade results in less variation in mixing, which leads to more consistency in extrusion and profile geometry.



**Electrochemically resistant coolant hose for SAE J20D3**

Ingredient	phr	phr
Vistalon 4600	100	100
N650 GPF-HS Carbon Black	95	90
Mistron Vapor Talc	75	
Paraffinic Oil – Type ASTM 104B	70	60
Zinc Oxide	5	10
Stearic Acid	1	
Paraffin Wax		5
AgeRite MA		1
Vulkanox MB-2		2
Vulcup 40-KE		8
SR-206		1
Sulfur	0.3	
TMTDS	0.6	
TMTMS	0.6	
TETDS	0.6	
ZDBDC	1.5	
Sulfasan R	2.0	
Formula weight	352	267
Specific Gravity	1.26	1.12

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**Typical properties based on  
above compound**
**SAE J20D3**
**Mooney Viscosity (ML), 100°C**

1+8 minute	50	71
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**Mooney Scorch (MS), 132°C**

15 minutes	14	24
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**Press Cure 20 min/170°C**

Hardness, Shore A	55-75	68	65
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100% Modulus, MPa		3.2	2.4
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200% Modulus, MPa		5.6	6.3
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Tensile Strength, MPa	7 min	13.4	14.9
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Elongation, %	300 min	530	409
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**Heat Resistance ASTM D573, 168 hr/150°C**

Hardness Change, point	15 max	9	7
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Tensile Strength Change, %	-35 max	-2.7	0
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Elongation Change, %	-66 max	-48	-1
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**Compression Set ASTM D395(B)**
**Solid Solid**

70 hr/125°C/25% defl., %	75 max	56	23
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**Compression Set ASTM D1228-87 (92)**

-20°C/22 hr/30 min result, %	63
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**Coolant Immersion, 50/50 vol Commercial Coolant/Distilled Water 1000 hr**

Hardness Change, point	-10 to 10	-3
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Tensile Strength Change, %	-20 max	-3
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Elongation Change, %	-25 max	-13
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**ECR, SAE J1664, Method 2**
**Method 1**

Weight Change, %	No Striations	4.6
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