

Vistalon™ 722 EPDM rubber for excellent processability and flexibility

Energy lives here™



Vistalon™ 722 EPDM rubber, which offers excellent electrical properties, can provide excellent processability of the polymer and cable compound, enhanced cable flexibility and low temperature performance compared with conventional EPDM, cross-linked polyethylene and competitive metallocene-based EPDM.

Your Challenges

- Productivity
- Durability
- Flexibility
- Sustained flexibility

Our Solution

- Clean polymer
- Easy to handle pellets
- Excellent processability
- Enhanced flexibility of final cable
- Low temperature performance
- Excellent electrical performance
- Cost efficiency

Suitable for medium- and low-voltage wire and cable applications, Vistalon 722 EPDM rubber is supplied in pellet rather than baled form, making it easy and clean to use.

Already approved in several commercial applications, Vistalon 722 EPDM rubber is proving highly successful.

Vistalon 722 EPDM rubber offers a number of benefits compared with competitive materials:

Versus conventional EPDM

- Improved flexibility
- Lower cost

Versus cross-linked polyethylene

- Improved flexibility and low temperature performance

Versus competitive metallocene EPDMs

- Improved electrical performance
- Enhanced flexibility

Vistalon™ 722 EPDM rubber is designed to provide excellent processability during cable manufacture and increased flexibility of the final cable construction.

Comparison of key cable compound properties

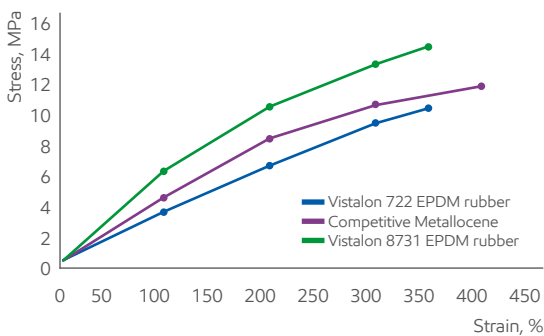
	Test Method (ASTM)	Vistalon 722 EPDM rubber	Competitive Metallocene EPDM	Vistalon 8731 EPDM rubber (Ziegler-Natta EPDM)
Mooney viscosity				
ML (1 + 4) 125°C	D1646	17	20	27
ODR: 200°C, 6 min				
Mh, dNm	D2084	76.1	77.9	105.0
Mh - Ml, dNm	D2084	70.3	71.2	97.2
t'90, min	D2084	1.9	2.0	1.9
Peak rate, dNm/min	D2084	64	66	104
Press cure: 165°C, 20 min				
Hardness, shore A	D2240	79	87	88
100% Modulus, MPa	D412	3.9	4.9	6.3
200% Modulus, MPa	D412	7.1	8.3	10.4
Tensile strength, MPa	D412	10.5	11.7	14.4
Elongation at break, %	D412	340	410	350
Heat aging: 150°C, 14 days				
Hardness change, points	D2240	0	0	0
Tensile strength change, %	D412	-10	-8	-17
Elongation at break change, %	D412	-10	-17	-23
Electrical properties				
Dissipation factor, 23°C	D150	0.0003	0.0005	0.0004
(Molded plaque of raw polymer; 600 volts, 60 Hz)				

Note: Values are for typical 3728 type medium-voltage insulation formulation.

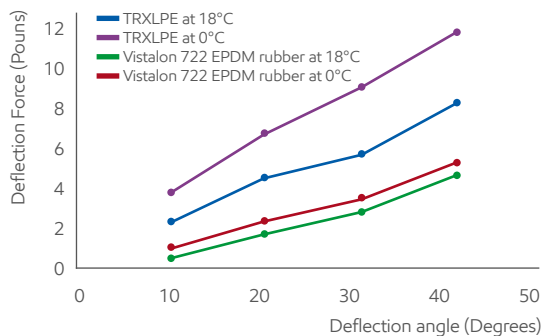
Vistalon 722 EPDM rubber has improved flexibility over conventional EPDM and competitive metallocene EPDM as indicated by the modulus at low strain.

In a typical 3728 type of medium-voltage insulation formulation, Vistalon 722 EPDM rubber affords excellent flexibility in an AEIC cable construction compared with TRXLPE. Furthermore, the ethylene-propylene elastomer is much less sensitive to a decrease in temperature than TRXLPE.

Stress/Strain curves for typical 3728 Type medium-voltage insulation formulation



Deflection force versus deflection angle for MV Cables based on Vistalon 722 EPDM rubber and TRXLPE insulation



Note: All cables are consistent with the AEIC CS8-00 specification.

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