Viton® AL-300

Fluoroelastomer

DuPont Performance Elastomers

Message:

Viton® AL-300 is an "AL-family" gum polymer that demonstrates improved processing when compared to its precursor Viton B-70N. This gum provides:
-Lower viscosity
-Improved mold flow
-Better mold release
-Less mold fouling
-Improved compression set resistance, and
-Good low temperature characteristics
Applications:
-Fuel systems, such as fuel injectors O-rings
-Injection and transfer molding of O-rings, gaskets, and other sealing devices
-Extruded cords, profiles and tubing, or calendered sheets, when a blend of gum polymers are used
-Solution coatings of fabrics and other substrates

General Information	
Features	Low compressive deformability
	Low viscosity
	Good demoulding performance
Uses	Washer
	Pipe
	Pipe fittings
	Seals
	Sheet
	Coating application
	Profile
Appearance	White
Forms	Particle
Processing Method	Extrusion
	Resin transfer molding
	Coating
	Calendering
	Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.77	g/cm³	ASTM D792
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	71		ASTM D2240
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (100% Strain)	5.10	MPa	ASTM D412

Tensile Strength (Break)	11.6	MPa	ASTM D412
Tensile Elongation (Break)	220	%	ASTM D412
Tear Strength [1] (23°C)	21.5	kN/m	ASTM D624
Compression Set (200°C, 70 hr)	25	%	ASTM D395
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength in Air			ASTM D573
200°C, 70 hr	-2.6	%	ASTM D573
100% strain, 200°C, 70 hr	9.8	%	ASTM D573
200°C, 168 hr	11	%	ASTM D573
100% strain, 200°C, 168 hr	18	%	ASTM D573
250°C, 70 hr	6.0	%	ASTM D573
100% strain, 250°C, 70 hr	-29	%	ASTM D573
250°C, 168 hr	-2.6	%	ASTM D573
100% strain, 250°C, 168 hr	3.9	%	ASTM D573
Change in Ultimate Elongation in Air			ASTM D573
200°C, 70 hr	-7.0	%	ASTM D573
200°C, 168 hr	-4.7	%	ASTM D573
250°C, 70 hr	-2.3	%	ASTM D573
250°C, 168 hr	0.0	%	ASTM D573
Change in Durometer Hardness in Air			ASTM D573
Support a, 200°C, 70 hr	2.0		ASTM D573
Support a, 200°C, 168 hr	1.0		ASTM D573
Support a, 250°C, 70 hr	0.0		ASTM D573
Support a, 250°C, 168 hr	71		ASTM D573
Change in Tensile Strength			ASTM D471
23°C, 168 hr, in reference fuel I	-50	%	ASTM D471
100% strain, 23°C, 168 hr, in reference fuel I	-27	%	ASTM D471
200°C, 70 hr, in IRM 903 oil	3.4	%	ASTM D471
100% strain, 200°C, 70 hr, in IRM 903 oil	0.0	%	ASTM D471
Change in Ultimate Elongation			ASTM D471
23°C, 168 hr, in reference fuel I	-28	%	ASTM D471
200°C, 70 hr, in IRM 903 oil	7.0	%	ASTM D471
Change in Durometer Hardness			ASTM D471
Support A, 23°C, 168 hr, in reference fuel I	-20		ASTM D471
Support A, 200°C, 70 hr, in IRM 903 oil	-1.0		ASTM D471
Change in Volume			ASTM D471
23°C, 168 hr, in reference fuel I	36	%	ASTM D471
200°C, 70 hr, in IRM 903 oil	3.5	%	ASTM D471
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	-19.5	°C	DSC
Additional Information			

Mooney Scorch, MS +1 at 121°C, Minimum Viscosity: 30Mooney Scorch, MS at 121°C, units rise at 30 min: 0.0MDR at 177°C, Micro Die, 0.5° Arc, 6 min motor:Minimum Torque, ML: 0.8 in-lbScorch Time, ts2: 1.0 minMaximum Torque, MH: 17.9 in-lbOptimum Cure Time, tc90: 2.4 minMDR at 177°C, Micro Die, 3° Arc, 12 min motor:Minimum Torque, ML: 0.839 minMaximum Torque, MH: 82.0 in-lbOptimum Cure Time, tc90: 3.8 minTemperature Retraction Test, ASTM D1329-88, TR-10: -19°CNominal Viscosity, ML 1 + 10, 121°C: 30Polymer Fluorine Content: 66%

NOTE	
1.	C mould

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China