

## LG Chemical NBR 8300 High Acrylonitrile Polymer

Category : Polymer , Thermoset , Rubber or Thermoset Elastomer (TSE)

### Material Notes:

Description: NBR 8300 is a copolymer of butadiene-acrylonitrile and the powdered nitrile elastomer manufactured by advanced emulsion polymerization technology of Goodyear and LG Chem. NBR 8300 has excellent compatibility with up to 100 parts of PVC resin, its plasticizers, fillers, heat/UV stabilizers and pigments. Within a PVC matrix, NBR 8300 adds the oil and fuel resistance to PVC compound and also it can improve the impact resistance of PVC. NBR 8300/PVC blend acts like a TPEs and substitutes for vulcanized rubber and TPU in many applications due to its excellent fuel and grease resistance. Applications: NBR 8300 is recommended to use in overflow tubing, vacuum tubing, grommet seals, cable sleeves, gaiters, guard bellows, fuel hoses and seals. In other applications, it is used as modifier for ABS crash pads and also as binder for brake linings. CAS No: 9003-18-3 Information provided by LG Chemical

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LG-Chemical-NBR-8300-High-Acrylonitrile-Polymer.php](http://www.lookpolymers.com/polymer_LG-Chemical-NBR-8300-High-Acrylonitrile-Polymer.php)

Physical Properties	Metric	English	Comments
Specific Gravity	0.980 g/cc	0.980 g/cc	
Volatiles	0.50 %	0.50 %	
Mooney Viscosity	49 @Temperature 100 °C	49 @Temperature 212 °F	ML 1+4

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	59	59	Forming
	65	65	Fuel Resistance
	69	69	Heat Resistance
Tensile Strength at Break	54 @Temperature 25.0 °C, Time 259000 sec	54 @Temperature 77.0 °F, Time 72.0 hour	Fluid Aging ASTM Fuel D
	70 @Temperature 121 °C, Time 605000 sec	70 @Temperature 250 °F, Time 168 hour	Circulating Oven Aging
Tensile Strength at Break	11.0 MPa	1600 psi	Fuel Resistance
	11.7 MPa	1700 psi	Heat Resistance
	12.1 MPa	1750 psi	Forming
	8.04 MPa @Temperature 25.0 °C, Time 259000 sec	1170 psi @Temperature 77.0 °F, Time 72.0 hour	Fluid Aging ASTM Fuel D

Mechanical Properties	Metric	English	Comments
	11.7 MPa	1700 psi	
	@Temperature 121 °C, Time 605000 sec	@Temperature 250 °F, Time 168 hour	Circulating Oven Aging
Elongation at Break	460 %	460 %	Forming
	480 %	480 %	Heat Resistance
	500 %	500 %	Fuel Resistance
	484 %	484 %	
	@Temperature 121 °C, Time 605000 sec	@Temperature 250 °F, Time 168 hour	Circulating Oven Aging
	500 %	500 %	
	@Temperature 25.0 °C, Time 259000 sec	@Temperature 77.0 °F, Time 72.0 hour	Fluid Aging, ASTM Fuel D
300% Modulus	0.00758 GPa	1.10 ksi	Forming

Descriptive Properties	Value	Comments
Bound AN Content	0.32	
Components	Antioxidant(WINGSTAY 29)	1 phr, Heat Resistance
	Antioxidant(WINGSTAY 29)	1 phr, Fuel Resistance
	CaCO3	10 phr, Forming
	Carbon Black	2 phr, Forming
	Forming Agent(CELOGEN AZ-130)	0.5 phr, Forming
	NBR 8300	43.6 phr, Forming
	NBR 8300	33 phr, Heat Resistance
	NBR 8300	43.6 phr, Fuel Resistance
	Plasticizer(DOP)	70 phr, Fuel Resistance
	Plasticizer(DOP)	90 phr, Forming
	Plasticizer(PARAPLEX G-62)	3 phr, Forming
	Plasticizer(PARAPLEX G-62)	5 phr, Fuel Resistance
	Plasticizer(PARAPLEX G-62)	5 phr, Heat Resistance
	Plasticizer(PLASTHALL P550)	75 phr, Heat Resistance

Descriptive Properties	PVC (K=70) Value	96.4 phr. Forming Comments
	PVC(K=70)	97 phr, Heat Resistance
	PVC(K=70)	96.4 phr, Fuel Resistance
	Stabilizer(MARK 308)	1 phr, Fuel Resistance
	Stabilizer(MARK 308)	1 phr, Forming
	Stabilizer(MARK 974-A)	0.5 phr, Forming
	Stabilizer(MARK 974-A)	1 phr, Heat Resistance
	Stabilizer(MARK 974-A)	2 phr, Fuel Resistance
	Stearic Acid	2 phr, Heat Resistance
	Stearic Acid	0.5 phr, Fuel Resistance
Volume Swell	+4.2%	

## Contact Songhan Plastic Technology Co.,Ltd.

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