

LG Chemical NBR 6280 High Acrylonitrile Polymer

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

Material Notes:

Description: NBR 6280 is a copolymer of butadiene and acrylonitrile manufactured by advanced emulsion polymerization technology of Goodyear and LG Chem. NBR 6280 is a non staining, high mooney, and medium high acrylonitrile polymer designed to aid in processing operations such as extruding and calendaring. NBR 6280 has been designed to satisfy the need for high level plasticizers. Applications: NBR 6280 is recommended to use in shoe products, chemically blown sponge, resistance to fuel and oil products. 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-6280-High-Acrylonitrile-Polymer.php

Physical Properties	Metric	English	Comments
Specific Gravity	0.990 g/cc	0.990 g/cc	
Volatiles	0.20 %	0.20 %	
Mooney Viscosity	80 @Temperature 100 Â°C	80 @Temperature 212 Â°F	ML 1+4
Ash	<= 0.50 %	<= 0.50 %	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	70 @Temperature 145 Â°C, Time 1190 sec	70 @Temperature 293 Â°F, Time 0.330 hour	Cured
	74 @Temperature 100 Â°C, Time 259000 sec	74 @Temperature 212 Â°F, Time 72.0 hour	Circulating Oven Aging
	48 @Treatment Temp. 25.0 Â°C, Time 259000 sec	48 @Treatment Temp. 77.0 Â°F, Time 72.0 hour	Aged fuel C
	69 @Treatment Temp. 100 Â°C, Time 259000 sec	69 @Treatment Temp. 212 Â°F, Time 72.0 hour	Aged ASTM D #3 Oil
	74 @Treatment Temp. 100 Â°C, Time 259000 sec	74 @Treatment Temp. 212 Â°F, Time 72.0 hour	Aged ASTM D #1 Oil
	21.2 MPa	3070 psi	

Mechanical Properties	Metric	English	Comments
	@ Temperature 145 Â°C, Time 1190 sec	@ Temperature 293 Â°F, Time 0.330 hour	
	21.5 MPa	3120 psi	
	@Temperature 100 Â°C, Time 259000 sec	@Temperature 212 Â°F, Time 72.0 hour	Circulating Oven Aging
	30.1 MPa	4370 psi	
	@Temperature 145 Â°C, Time 2990 sec	@Temperature 293 Â°F, Time 0.830 hour	cured; ASTM D412
	16.2 MPa	2350 psi	
	@Treatment Temp. 25.0 Â°C, Time 259000 sec	@Treatment Temp. 77.0 Â°F, Time 72.0 hour	Aged fuel C
	21.4 MPa	3100 psi	
	@Treatment Temp. 100 Â°C, Time 259000 sec	@Treatment Temp. 212 Â°F, Time 72.0 hour	Aged ASTM D #1 Oil
	21.6 MPa	3130 psi	
	@Treatment Temp. 100 Â°C, Time 259000 sec	@Treatment Temp. 212 Â°F, Time 72.0 hour	Aged ASTM D #3 Oil
Elongation at Break	397.1 %	397.1 %	
	@Temperature 100 Â°C, Time 259000 sec	@Temperature 212 Â°F, Time 72.0 hour	Circulating Oven Aging
	425 %	425 %	
	@Temperature 145 Â°C, Time 1190 sec	@Temperature 293 Â°F, Time 0.330 hour	Cured
	504 %	504 %	
	@Temperature 145 Â°C, Time 2990 sec	@Temperature 293 Â°F, Time 0.830 hour	cured; ASTM D412
	367.7 %	367.7 %	
	@Treatment Temp. 25.0 Â°C, Time 259000 sec	@Treatment Temp. 77.0 Â°F, Time 72.0 hour	Aged fuel C
	393.6 %	393.6 %	
	@Treatment Temp. 100 Â°C, Time 259000 sec	@Treatment Temp. 212 Â°F, Time 72.0 hour	Aged ASTM D #1 Oil
	399.7 %	399.7 %	
	@Treatment Temp. 100 Â°C, Time 259000 sec	@Treatment Temp. 212 Â°F, Time 72.0 hour	Aged ASTM D #3 Oil

Mechanical Properties	Metric	English	Comments
300% Modulus	0.0157 GPa	2.28 ksi	cured; ASTM D412
	@Temperature 145 Å°C, Time 2990 sec	@Temperature 293 Å°F, Time 0.830 hour	
Rebound	48.7 %	48.7 %	
	@Temperature 30.0 Å°C	@Temperature 86.0 Å°F	
Abrasion	0.3073	0.3073	AKRON
Compression Set	16.7 %	16.7 %	160Å°C x 30 min. Cured)
	@Temperature 100 Å°C, Time 259000 sec	@Temperature 212 Å°F, Time 72.0 hour	

Descriptive Properties	Value	Comments
Bound AN Content	0.34	
Color	Tan	
Components	HAF (IRB#7)	40 phr, ASTM D3187
	NBR 6280	100 phr, ASTM D3187
	Stearic Acid	1 phr, ASTM D3187
	Sulfur	1.5 phr, ASTM D3187
	TBBS	0.7 phr, ASTM D3187
	ZnO	3 phr, ASTM D3187
Compound Recipe	Antioxidant(3-C)	1 phr
	Antioxidant(RD)	2 phr
	Carbon Black(SRF)	80 phr
	CZ	2 phr
	NBR 6840	100 phr
	Plasticizer(DOP)	10 phr
	Stearic Acid	1 phr
	Sulfur	0.5 phr
	TT	1 phr
	Zinc Oxide	5 phr

Descriptive Properties	Value	Comments
	1.4 min	t'50, 160°C x 12 min, 1° Arc, MDR
	2.2 min	t'90, 160°C x 12 min, 1° Arc, MDR
	28.9 lb-in	MH, 160°C x 12 min, 1° Arc, MDR
	3.3 lb-in	ML, 160°C x 12 min, 1° Arc, MDR
Volume Swell	-0.019	Aged ASTM D #3 Oil (100°C x 72hrs)
	-0.061	Aged ASTM D #1 Oil (100°C x 72hrs)
	0.415	Aged fuel C (RT°C x 72hrs)

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China