NANCAR® 3645

Acrylonitrile Butadiene Rubber

Nantex Industry Co., Ltd.

Message:

NANCAR® 3645 is a medium high acrylonitrile butadiene copolymer with good oil resistance. It is polymerized at low temperature and contains sufficient antioxidant for normal aging conditions. It has low Mooney viscosity, superior processing characteristics, fast curing rate, low mold fouling, superior resilience properties and superior flowability.
NANCAR® 3645 is an excellent multi-purpose nitrile elastomer. It may be blended with vinyl resins to produce smooth extrusions and nerve-free sheets. Suggested applications include those in fuel hoses, packings, gaskets, oil seals, other car parts, oil resistant belts, footwear, roll covers and sponge products.

General Information			
Additive	Antioxidant		
Features	Antioxidant Copolymer Fast Cure Good Moldability Good Processability High Flow Oil Resistant Resilient		
Uses	Belts/Belt Repair Blending Footwear Gaskets Hose Seals Sheet		
Forms	Pellets		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	0.980	g/cm^3	
Mooney Viscosity			ASTM D1646
ML 1+4, 100°C [1]	74	MU	
ML 1+4, 100°C	45	MU	
Acrylonitrile Content - Bound	36.0	%	Internal Method
Solubility - in MEK	100	%	
Stabilizer	Non-staining		
Heat Loss	0.20	%	ASTM D5688
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240

Shore A, 5 sec [2]	77		
Shore A, 5 sec [3]	76		
Shore A, 5 sec [4]	75		
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress			ASTM D412
300% Strain [5]	12.2	MPa	
300% Strain [6]	11.7	MPa	
300% Strain [7]	10.0	MPa	
Tensile Strength			ASTM D412
Yield [8]	25.8	MPa	
Yield [9]	26.3	MPa	
Yield [10]	26.5	MPa	
Tensile Elongation			ASTM D412
Break [11]	550	%	
Break [12]	570	%	
Break [13]	630	%	
Tear Strength	62.0	kN/m	ASTM D624
Compression Set [14] (100°C, 70 hr)	55	%	ASTM D395
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength in Air [15] (100°C, 70 hr)	1.0	%	ASTM D573
Change in Ultimate Elongation in Air [16] (100°C, 70 hr)	-25	%	ASTM D573
Change in Durometer Hardness in Air [17] (Shore A, 100°C, 70 hr)	3.0		ASTM D573
Change in Tensile Strength [18]			ASTM D471
100°C, 70 hr, in ASTM #1 Oil	1.0	%	
100°C, 70 hr, in IRM 903 Oil	-23	%	
Change in Ultimate Elongation [19]			ASTM D471
100°C, 70 hr, in ASTM #1 Oil	-22	%	
100°C, 70 hr, in IRM 903 Oil	-30	%	
Change in Durometer Hardness [20]			ASTM D471
Shore A, 100°C, 70 hr, in ASTM #1 Oil	1.0		
Shore A, 100°C, 70 hr, in IRM 903 Oil	-8.0		
Change in Volume [21]			ASTM D471
100°C, 70 hr, in ASTM Oil #1	-0.20	%	
100°C, 70 hr, in IRM 903 Oil	12	%	

NOTE	
1.	Uncured
2.	CURED @150°C for 60 mins
3.	CURED @150°C for 40 mins
4.	CURED @150°C for 20 mins
5.	CURED @150°C for 60 mins

6.	CURED @150°C for 40 mins
7.	CURED @150°C for 20 mins
8.	CURED @150°C for 60 mins
9.	CURED @150°C for 40 mins
10.	CURED @150°C for 20 mins
11.	CURED @150°C for 60 mins
12.	CURED @150°C for 40 mins
13.	CURED @150°C for 20 mins
14.	CURED @150°C for 60 mins
15.	CURED@150°C × 40 MINUTES
16.	CURED@150°C × 40 MINUTES
17.	CURED@150°C × 40 MINUTES
18.	CURED@150°C × 40 MINUTES
19.	CURED@150°C × 40 MINUTES
20.	CURED@150°C × 40 MINUTES
21.	CURED@150°C × 40 MINUTES

Recommended distributors for this material

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