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NBR 6840

NBR 6840 is a copolymer of butadiene and acrylonitrile manufactured by advanced emulsion polymerization technology of Goodyear and LG Chem.

NBR 6840 is a non staining, medium low mooney, and medium high acrylonitrile polymer designed for easy processing, high productivity and excellent elastic properties.

NBR 6840 offers very low mold fouling, fast cure, and high resilience.

NBR 6840 is recommended to use in wide range of general purpose applications including injection molded o-rings, calendered belting, extruded hose and sponge.

Furthermore, it's also applicable to food contact items.

BASIC PROPERTIES		VULCANIZATE PROPERTIES	
Polymerization	Cold Emulsion	Recipes(ASTM D3187)	
Bound AN Content(%)	34.0	NBR 6840	100.0 phr
Volatile Matter(%)	0.3	HAF(IRB #8)	40.0
Ash(%)	Max. 1.0	ZnO	3.0
Stabilizer	Non-Staining	Stearic Acid	1.0
Mooney Viscosity(ML1+4,100°C)	40	TBBS	0.7
Color	Light Tan	Sulfur	1.5
Specific Gravity	0.98	Total	146.2
Packaging Information		Stress-Strain Properties	
Bale Weight	35kg	(ASTM D412, 145°C×50min. Cured)	
Bale wrapping film : LDPE		300% Modulus(kg/cm ²)	145
Shelf Life : 18 months from date of production at room temperatures not exceeding 30°C under belowed storage condition (Retest critical parameters like MV and others after the expiry of shelf life).		Elongation(%)	517
Storage condition		Tensile (kg/cm ²)	290
NBR should be stored in warehouse to be protected from sunlight, heat, moisture and foreign materials.			

*The above data is a typical value, therefore there may be a slight difference between the elements of a supplied product and the data.



- DAESAN PLANT : Tel 82-41-661-2702 FAX 82-41-661-2709
- R&D CENTER : Tel 82-42-866-5763 FAX 82-42-861-7146
- SEOUL OFFICE : Tel 82-2-3773-7923 FAX 82-2-3773-3071
- PUSAN OFFICE : Tel 82-51-801-2669 FAX 82-51-801-2650



NBR 6840 PACKING STUDY

COMPOUND RECIPES		PROPERTIES OF COMPOUNDS	
NBR 6840	100 phr	Mooney Viscosity(ML1+4,100°C)	51
Carbon Black(SRF)	80.0	Rheometer(MDR,160°C×12 min,1° Arc, MDR)	
Zinc Oxide	5.0	ML(lb-in)	1.7
Stearic Acid	1.0	MH (lb-in)	27.1
Antioxidant(RD)	2.0	ts1 (min.)	0.9
Antioxidant(3-C)	1.0	Tc'50 (min.)	1.3
Plasticizer(DOP)	10.0	Tc'90 (min.)	1.7
Sulfur	0.5		
TT	1.0		
CZ	2.0		
Total	202.5		

Basic Properties(145°C×20min. Cured)		
Hardness(shore A)		70
Elongation(%)		417
Tensile (kg/㎠)		177
Circulating Oven Aging(100°C×72hrs)		
Hardness Change(point)		+5
Tensile Change(%)		+6.5
Elongation Change(%)		-30.6
Aged ASTM #1 Oil(100°C×72hrs)		
Hardness Change(point)		+5
Tensile Change(%)		+12.3
Elongation Change(%)		-22.1
Volume Swell(%)		-6.8
Aged ASTM #3 Oil(100°C×72hrs)		
Hardness Change(point)		+1
Tensile Change(%)		+6.5
Elongation Change(%)		-22.1
Volume Swell(%)		-2.9
Aged FUEL C(R.T°C×72hrs)		
Hardness Change(point)		-23
Tensile Change(%)		-40.1
Elongation Change(%)		-45.4
Volume Swell(%)		+41.2
Compression Set(160°C×30min. Cured)		
100°C×72hrs(%)		21.2
Rebound(30°C, %)		44.3
AKRON Abrasion		0.3439

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