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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 Bound AN Content(%) Volatile Matter(%) Ash(%) Stabilizer Mooney Viscosity(ML1+4,100°C) Color Specific Gravity Packaging Information Bale Weight Bale wrapping film : LDPE 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). Storage condition NBR should be stored in warehouse to be protected from sunlight, heat, moisture and foreign materials.	Cold Emulsion 34.0 0.3 Max. 1.0 Non-Staining 40 Light Tan 0.98 35kg	Recipes(ASTM D3187) NBR 6840 HAF(IRB #8) ZnO Stearic Acid TBBS Sulfur Total Stress-Strain Properties (ASTM D412, 145°C×50min. Cured) 300% Modulus(kg/cm ²) Elongation(%) Tensile (kg/cm ²)	100.0 phr 40.0 3.0 1.0 0.7 1.5 146.2 145 517 290

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



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- R&D CENTER : Tel 82-42-866-5763 FAX 82-42-861-7146
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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/cm ²)		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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