

KUMHO BR

Butadiene Rubber

beyond
the best

KUMHO PETROCHEMICAL

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Kumho BR is polybutadiene polymer (BR) with solution polymerization. In addition to the very low glass transition temperature around -100°C, it has excellent abrasion resistance, resiliency and weather resistance which has made it the most widely used synthetic rubber along with SBR.



HBR



NdBR



LBR

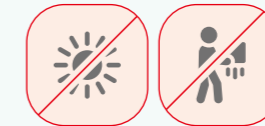


Application

Packages - 35kg / Bale - 1.05MT / Pallet (30 Bales) - 1.26MT / Pallet (36 Bales)

Applications KBR01, KBR01L, NdBR40, NdBR45, NdBR60, NdBR80 are usually used in tires, footwears, golf ball, belt, rubber hoses and other mechanical rubber products. KBR820 has good silica affinity so it is good for tire application requiring low rolling resistance. KBR710S and KBR710H have low cis content and it is useful for plastic modification for HIPS.

Precautions for handling



- 1 The direct expose to sunlight and humidity may cause discoloration or quality deterioration.
- 2 Keep the product away from direct sunlight, humidity and checmicals and store in a cool and dry place at temperature below 35°C.
- 3 You have to use a carrying apparatus since the risk of injury while carrying 35Kg per bale, do not multi layer loading up because of the safety accident.

Physical properties

Category	Grade	Main Application	Application	Characteristics	MV(100°C)	Volatile matter	Tensile strength (kg/cm ²)	Elongation (%)
HBR*	KBR01	Tire(PCR), Shoes	Tire, Shoes outsole	Abrasion resistance, Resilience	40.0~50.0	Max. 0.5wt%	165~240	410~590
	KBR01L		Shoes outsole	Low MV, Good processibility	26.0~34.0	Max. 0.5wt%	MIN.140	MIN.400

* Ni-based catalyst

Category	Grade	Main Application	Application	Characteristics	MV(100°C)	TDAE Oil(%)	Volatile matter	Tensile strength (kg/cm ²)	Elogation(%)
HBR*	NdBR40, NdBR45**	Tire(PCR), Golf ball	Tire tread & sidewall, Golf ball	Excellent resilience & abrasion resistance	38.0~48.0	-	0.5wt%	170~275	410~590
	NdBR60			High MV, Excellent resilience	58.0~68.0	-	0.5wt%	170~275	410~590
	NdBR80	Tire	Winter tire tread & sidewall	TDAE Oil extended NdBR	32.0~42.0	25.8~28.8	0.5wt%	170~275	410~590

* Nd-based catalyst / ** NdBR45 is an improved MWD(molecular weight distribution) property of NdBR40

Category	Grade	Main Application	Application	Characteristics	MV(100°C)	Volatile matter
LBR*	KBR820	Tire(PCR)	Tire	Excellent LRR	68.0~88.0	Max. 0.75wt%

* Li-based catalyst

Category	Grade	Main Application	Application	Characteristics	Solution viscosity (Cps)	Gel Rank	Gel content (wt%)	Cis content (wt%)	Vinyl content (wt%)
LBR*	KBR710S	Impact modifier	HIPS	Medium MV / PS impact modifier	160~180	Max. B1	Max. 0.02	32.5~36.5	13.0~16.0
	KBR710H		HIPS	High MV / PS impact modifier	240~260	Max. B1	Max. 0.04	32.5~36.5	13.0~16.0

* Li-based catalyst

