



High Cis1,4-Polybutadiene

(Grade 1220)

*Raw Material			
Typical properties	Test Method	UNIT	Value
Cis content	ZEON R-130A	Wt	Min. 97
Raw Mooney Viscosity	ASTM D-1646	ML-4	41-49
Volatile Matter	ASTM D-1416	% Wt	Max 0.5
Ash Content	ASTM D-1416	% Wt	Max 0.3
**Compound			
Compound Mooney Viscosity	ASTM D-1646	ML-4	Max 77
Tensile (35 min)	ASTM D-412	Kgf/cm2	Min 150
Elongation (35 min)	ASTM D-412	%	Min 440
300% Modulus at 145 °C	ASTM D-412	Kgf/cm2	68-108
25 Min.			74-114
35 Min.			74-114
50 Min.			
Rheometer at 160 °C	ASTM D-3189	lbf in	32.0-40.0
MH		lbf in	5.2-11.2
ML		Min	2.1-6.1
TS-1		Min	6.0-10.4
T50		Min	8.3-13.1
T90			
Compound Recipe			
Raw BR-1220	ASTM D-3189	Part	100
HAF Carbon (IRB No. 6)		“	60
Zinc Oxide		“	3
Stearic Acid		“	2
Accelerator (TBBS)		“	0.9
Sulfur		“	1.5
Highly Aromatic Oil		“	15
Vulcanization Temperature		°C	145
Other Specifications			
Anti Oxidant	Non Staining – High Quality		
Catalyst Type	Cobalt		
Packaging	35 Kg Bales, Wrapped In 50 Micron LDPE Film & each 30 bales are in a box pallet		

* Certified properties

** Values shown are averages & are not to be considered as product specifications.



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❖ Specification of Chemicals Used In the Compound:

Carbon Black HAF: IRB No. conforming to NBS-SRM No. 378

Zinc Oxide (White Zinc): NBS-SRM No. 370 JIS K-1410 No. 1

Stearic Acid: NBS-SRM No. 372 Fractional fatty acid of JIS K- 3341

Oil: ASTM oil type 103 (sansen 4240 of Japan sun oil Co.)

Accelerator (TBBS): U.S. monanto's santocure-NS conforming to NBS-SRM No. 384

Sulfur: NBS-SRM No. 371, one type of JIS K-6222.325 mean product

❖ Composition:

BR-1220 is a stereo specific high Cis 1, 4 - polybutadiene. It is manufactured by a solution process using a cobalt catalyst which produces polymers with a low level of impurities. BR-1220 contains a non-staining high quality stabilizer system, too.

❖ Applications:

BR-1220 is used for the production of tire, footwear, belts, rubber hoses & other mechanical rubber products.

❖ Storage:

BR-1220 should be stored in an adequately ventilated area where it will not be subjected to sunlight, extreme temperatures or sources of ignition.

Under the above-motional conditions BR-1220 should have a storage life of max. 12 months from the date of production.