

Synthetic Rubber (PBR)

Rubber — Polybutadiene

Document No.	TI/TDS/PBR-01	Grade Code	TI-PBR-01
Issue Date	06-08-2026	Revision	00

Polybutadiene rubber (PBR) — a high-cis synthetic rubber.

Typical applications: Tyres, footwear & general rubber goods.

SPECIFICATIONS

Parameter	Unit	Specification	Result	Test Method
Raw Mooney viscosity	MU	41 – 49	43.5	ASTM D1646-07
Cis content	wt%	≥ 96	96.8	Internal
Volatile matter	wt%	≤ 0.75	0.4	ASTM D5668-09
Ash content	wt%	≤ 0.3	0.05	ASTM D1416
Compound Mooney viscosity	MU	≤ 77	72	ASTM D1646
Tensile strength (35 min)	kgf/cm²	≥ 150	167	ASTM D412-06
Elongation at break (35 min)	%	≥ 440	452	ASTM D412-06
300% modulus @ 145 °C, 25 min	kg/cm²	60 – 108	79	ASTM D412-06
300% modulus @ 145 °C, 35 min	kg/cm²	74 – 114	91	ASTM D412-06
300% modulus @ 145 °C, 50 min	kg/cm²	74 – 114	94	ASTM D412-06

Disclaimer: Values are typical and given in good faith; they are subject to normal production tolerance and do not constitute a warranty. The buyer is responsible for verifying suitability for their own application and process.