

SBR-1502

Synthetic styrene-butadiene rubber

Synthetic rubber SBR-1502 is styrene (23.5%) and butadiene (76.5%) copolymer obtained by cold emulsion polymerization using the soaps of resin and fatty acids. The polymer is stabilized by non-staining antioxidant and contains no nitrosamines and substances that may become a source of nitrosamines.

Appearance: bale from light-yellow to light-brown color; weight of a bale — (30 ± 1) kg

Package: PE wrapping film (Vicat softening point ≤ 95 °C); metal or plywood containers (1,26 MT), cardboard box (0,54 MT)

Shelf life: 2 (two) years from the date of manufacture
Storage conditions: at the temperature not higher than 30 °C, in place protected from direct sunlight and atmospheric precipitation

Parameters	SBR-1502		Test method
	grade B	grade C	
Mooney viscosity MML ₁₊₄ (100 °C), UM	51 ± 5	53 ± 5	ASTM D 1646
Organic acids, % wt	5,0–7,0	5,0–7,0	ASTM D 5774
Organic acids soap, % wt	≤0,30	≤0,30	ASTM D 5774
Bound styrene, % wt	23,5 ± 1,0	23,5 ± 1,0	ASTM D 5775
Volatile matter, % wt	≤0,8	≤0,8	ASTM D 5668
Ash, % wt	≤0,5	≤0,5	ASTM D 5667

Stress- strain properties (ASTM D 3185 (method A) recipe), 145 °C × 35 min.

Tensile stress at 300 % elongation, MPa	≥13.0	≥13.0	
Tensile strength, MPa	≥22.5	≥22.5	ASTM D 412
Ultimate elongation, %	≥420	≥420	

Curing characteristics of rubber compound: Rheometer MDR 2000, 160 °C, deformation of 0.5°, MH at 30 min.

Minimum torque (ML), dNm	1.8–3.0	1.8–3.0	
Maximum torque (MH), dNm	15.0–21.0	15.0–21.0	
Scorch time (ts'1), min.	2.2–4.5	2.2–4.5	ASTM D 5289
Time to 50 % of full cure (t'50), min.	6.5–11.5	6.5–11.5	
Time to 90 % of full cure (t'90), min.	12.0–20.0	12.0–20.0	