

Technical Data Sheet

Product: SBR-1705

Description

The synthetic butadiene-alpha-methylstyrene (styrene) rubber is produced by emulsion copolymerization of butadiene with alpha-methylstyrene (styrene) at low temperatures with an emulsifier. VS-1 is used as an antioxidant. The SBR-1705 is an oil-extended rubber filled with the oil PN-6 (DAE type oil).

Application

The SBR-1705 is a general-purpose rubber and it is widely used in the tire industry, in mechanical rubber, footwear, cable, and other branches of industry.

Specifications

Parameter	Value	Test Method
Mooney viscosity MML 1+4 (100°C)	41 -51	ASTM D 1646 (7.2.2)
Mooney viscosity lot spread, max	1	-
Mass fraction of volatile matters, %, max.	0,6	ASTM D 5668
Mass fraction of Ash, %, max.	0,6	ASTM D 5667
Mass fraction of organic acids, %	4,1 - 1,1	ASTM D 5774
Mass fraction of organic acids soaps, %	0,6	
Mass fraction of solvent extract, %	F1E - G E	
Mass fraction of oil	F1E - F1E	
Mass fraction of second bound monomer, % (alphamethylstyrene)	22,0 - 25,0	ASTM D 5775
Vulcanization characteristics (rotorless rheometer of the type MDR-2000 (ASTM D 3185, method A))		
Minimum torque, ML, dNm	1,4 - 3,0	ASTM D 5289
Maximum torque, MH, dNm	1H,0 - 6E,€	
Vulcanization start time, ts1, min	6E - 6,€	
Time to reach 50% degree of vulcanization, t50, min	6,5 - 1F,5	
Time to reach 90% degree of vulcanization, t90, min	12,0 - 6E,€	
Elastic and strength properties of rubbers under elongation (in optimum vulcanization)		
Modulus at 300% elongation, MPa, min.	10,8	ASTM D 412
Conditional tensile strength, MPa, min.	21,6	
Relative elongation at break, %, min	400	

Packaging

The SBR-1705 is produced in the form of bales about 30 kg each, wrapped in polyethylene film. Packed in universal plywood containers (UPC). (See appendix)

Storage and transportation

Rubber is stored indoors at a temperature not higher than +30 °C. During storage, the rubber must be protected from contamination, direct sunlight, and precipitation.



Universal Plywood Container (UPC)

Characteristics:

- The plywood box is equipped with a laminated polypropylene fabric cover for cargo safety;
- The box is folding with a removable wall for easy unloading;
- Metal elements ensure container durability;
- The box is assembled manually without the need to use auxiliary materials or tools.

Parameters:

Tare Weight: 70 kg (\pm 5 kg)

Net weight: 1,260 kg (42 briquettes)

Gross Weight: 1,330 kg (42 briquettes)

