

# 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	1H0 - 6E,€	
Vulcanization start time, ts1, min	G E - 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)

