SKS-30 ARKM-27 / SBR-1723 STYRENE-BUTADIENE RUBBER

KAROLEF

Styrene-butadiene rubber SKS-30 ARKM-27 (SBR-1723) is a styrene and butadiene copolymer obtained by cold polymerization with the use of mixture of rosin and fatty acids soaps, filled with TDAE-type aromatic oil and stabilized by staining antioxidant.

The monomers are registered under EU REACH.

APPLICATION: widely used in tire, industrial rubber and other industries.

Rubber should not contain any foreign impurities and must meet the following requirements:

Appearance: briquettes (bales)

Weight: 30.0±1.0 kg

Colour: from light-brown to dark-brown

TECHNICAL REQUIREMENTS

Parameter	Standard	Test Method	Note
Mooney viscosity ML 1+4 (100°C)	47-57	ASTM D 1646 (para. 7.2.2)	☑
Viscosity spread within a batch, units, max	6	---	☑
Volatile matter content, %, max (1 hour)	0.6	ASTM D 5668 (method C)	☑
Ash content, %, max	0.6	ASTM D 5667 (part A)	☑
Organic acid content, %	4.0-5.6	ASTM D 5774	☑
Organic acids soaps content, %, max	0.3	ASTM D 5774	☑
Bound styrene content, %	22-25	ASTM D 5775	☑
Oil (TDAE) content, %	26-29	ASTM D 5774	☑
Antioxidant content, %			
- VS-1 or	0.3-0.7	method of supplier	☑
- Agidol-2	0.8-1.5		
Rheometric Properties according to ASTM D 5289			
ML, dNm	1.6-2.3	ASTM D 5289	✧
MH, dNm	12.6-16.5	ASTM D 5289	✧
ts1, min	3.5-6.5	ASTM D 5289	✧
t'50, min	6.5-10.5	ASTM D 5289	✧
t'90, min	15-18.5	ASTM D 5289	✧

☑ specified in the certificate of quality.
✧ non-rejectable.

Preparation of rubber mixes is carried out in accordance with ASTMD 3185 recipe 1A, mixing - according to method A. Mixing mills are prepared according to ASTM D 3182. Rheometric properties are determined according to ASTM D 5289 using an MDR 2000 rheometer (flow meter). Wait time for rubber mix before testing is 2-6 hours.

Rubber mix recipe in parts by weight acc. to ASTM D 3185, recipe 1A:

Rubber	100.00
Zinc oxide	3.00
IRB 7 (N330) carbon black	50.00
Sulphur	1.75
Stearic acid	1.00
TBBS (N-tert-Butyl-2-benzothiazolesulfenamide)	1.00

Rheometer MDR 2000, measurement conditions:

Temperature, °C	160
Duration, min	30
Oscillation amplitude, deg.	0.5
Oscillation frequency, Hz	1.7

PACKING: Rubber briquettes (bales) are packaged in marked PE film (thickness of 0.05 ± 0.01 mm, melting temperature of 108-112°C), then – in plastic box pallets of 450kg or in plywood containers of 1,080kg, or metal containers of 1,260kg.

TRANSPORTATION: Rubber is transported by all types of transport in covered transporting means in accordance to all rules of cargo's transportation standing at transport of this form.

STORAGE: At a temperature not exceeding 30℃, in dry place free from direct sunlight.

GUARANTEED SHELF LIFE: 1 (one) year from the manufacture date. After the expiration of the guaranteed shelf life, the rubber can be used for its intended purpose after confirmation of its conformity to the requirements of this product specification.