

## BUNA™ SB 1723-SCHKOPAU

## COLD POLYMERISED EMULSION STIRENE

## BUTADIENE RUBBER (E-SBR)

### Composition

BUNA™ SB 1723-Schkopau is manufactured by cold polymerization using mixed rosin acid/fatty acid soaps. In relation to solid rubber it is plasticized with 37.5 parts of TDAE oil which does comply with EU DIRECTIVE 2005/69/EC for use in tires within the EU. A discoloring stabilizer is added during the production process.

### Application

BUNA™ SB 1723-Schkopau is a general purpose rubber. It can be processed in all sectors of the tire and rubber industry. The main application is tire production.

### Packaging

- BUNA™ SB 1723-Schkopau is supplied in bales of 25 kg nominal weight.
- Bales are wrapped in 50 micron polyethylene film (Vicat softening temperature: 92 °C).
- One box contains forty eight bales (nominal 1200 kg)

### Specification sheet

Raw material specification sheets are available from Trinseo or your local supplier on request.

### Handling precautions

- BUNA™ SB 1723-Schkopau has to be kept away from sources of ignition.
- Reference must be made to the Safety Data Sheet for this product.
- The precautions advised in the Safety Data Sheet should be strictly observed.

### Storage

BUNA™ SB 1723-Schkopau should be stored in an adequately ventilated area where it will not be subjected to direct sunlight or temperatures in excess of 30 °C. Under these conditions BUNA™ SB 1723-Schkopau has a shelf life of at least 12 months.

## CHARACTERISTIC PROPERTIES OF BUNA™ SB 1723-SCHKOPAU

### Chemical and Physical Data

Property	Test Method	Unit	Value
<b>Mooney viscosity<sup>(1)</sup></b>	ASTM D 1646	MU	49.2
<b>Bound styrene</b>	ASTM D 5775	%	23.5
<b>Total extractables</b>	ASTM D 5774	%	31.9
<b>Organic acid</b>	ASTM D 5774	%	4.5
<b>Volatile matter<sup>(2)</sup></b>	ASTM D 5668	%	0.3
<b>Ash</b>	ASTM D 5667	%	0.04
<b>Specific gravity</b>	SM <sup>(3)</sup>	g/cm <sup>3</sup>	0.93

(1) ML 1+4 (100 °C) massed sample (2) 1 h at 105 °C in a hot air oven, 5 g sample (3) Supplier Method

### Test Formulation (ASTM D 3185-1A based on IRB8 black)

	Parts by Mass
<b>Polymer</b>	100.0
<b>Carbon black IRB8</b>	50.0
<b>Zinc oxide</b>	3.0
<b>Sulphur</b>	1.75
<b>Stearic acid</b>	1.0
<b>Accelerator (TBBS)</b>	1.0

### Rheometer<sup>a) b)</sup>

Property	Test Method	Unit	Value
<b>t<sub>s2</sub></b>	ASTM D 5289 <sup>(4)</sup>	min	5.0
<b>t<sub>c(50)</sub></b>	ASTM D 5289	min	7.8
<b>t<sub>c(90)</sub></b>	ASTM D 5289	min	13.9
<b>ML</b>	ASTM D 5289	dNm	2.4
<b>MH</b>	ASTM D 5289	dNm	16.0

### Vulcanisate Data<sup>a) b)</sup>

Property	Test Method	Unit	Value
<b>Tensile strength</b>	ASTM D 412 <sup>(5)</sup>	MPa	21.5
<b>Elongation at break</b>	ASTM D 412	%	420.0
<b>Modulus 300%</b>	ASTM D 412	MPa	14.0

(4) Test temperature 160 °C (5) Cure: 45 minutes at 145 °C (a) Material properties are typical properties and do not constitute a sales specification.  
(b) All figures are based on the test procedures of the Schkopau test lab.

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