

BST Elastomers Co., Ltd.

Specification of BSTE SBR0122

(Spec. Code : BSTE-STD-014)

Technical Data Sheet

Chemical Identification

Oil Extended Emulsion Styrene Butadiene Rubber (E-SBR)

Product Characteristic

RAW POLYMER

	Unit	Specification Value		Test Method
		Minimum	Maximum	
Volatile Matter	%	-	0.75	ASTM D5668-21
Ash Content	%	-	1.50	ASTM D5667-95 (Reapproved 2019)
Soap Content	%	-	0.50	ASTM D5774-95 (Reapproved 2019)
Organic Acid	%	4.20	6.20	ASTM D5774-95 (Reapproved 2019)
Bound Styrene	%	35.5	38.5	ASTM D5775-95 (Reapproved 2019)
Oil Content	%	23.9	26.9	ASTM D5774-95 (Reapproved 2019)
Raw Mooney Viscosity	MU	47.0	57.0	ASTM D1646-19a

ML1+4@100°C (Massed Method)

COMPOUND PROPERTIES

Compound Mooney Viscosity	MU	58	70	ASTM D1646-19a
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ML1+4@100°C

Tensile Strength @ 145°C, 35 min	MPa	19.1	-	ASTM D412-16 (2021)
Elongation at Break @ 145°C, 35 min	%	480	-	ASTM D412-16 (2021)

300% Modulus@145°C

25 minutes	MPa	6.3	11.1	ASTM D412-16 (2021)
35 minutes	MPa	8.3	13.1	ASTM D412-16 (2021)
50 minutes	MPa	9.4	14.2	ASTM D412-16 (2021)

COMPOUND RECIPE (ASTM D3185 - 06 (Reapproved 2016))

	Parts
Raw SBR0122	134.00
HAF Black (IRB#8)	67.00
Zinc Oxide	3.00
Stearic Acid	1.00
Accelerator (TBBS)	1.34
Sulfur	1.75

Compounding condition : 6 inch Two Roll Mill