

EMULSION STYRENE BUTADIENE RUBBER (E-SBR) BUNA™ SE



The Buna® SE product group comprises the general purpose emulsion styrene-butadiene rubbers (E-SBR) which is one of the most important types of synthetic rubber. Emulsion Styrene Butadiene Rubber is the most widely used rubber in the world, representing about 40% of the synthetic rubber market, which is a result of its excellent balance of properties and cost performance.

A typical E-SBR has 23,5% styrene with random distribution of the monomers in the polymer chain. Increasing the styrene content the processability is improved, as also is the tensile strength, but the resistance to low temperature and wear deteriorates. E-SBR presents a broad molecular weight distribution and a high degree of branching, so it processes easier than solution SBR.

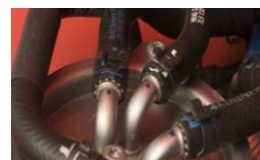
Buna® SE is produced by a cold (5 to 10°C) free radical polymerization mechanism, in which the monomers are emulsified in an aqueous medium with rosin and/or fatty acids. The monomers react and form a latex, which is then coagulated to generate the solid rubber. The products are available in clear or oil extended grades, with staining or non staining antioxidant. Buna® SE presents good mechanical properties, abrasion and tear resistance, being largely used in. More than half of the world production of E-SBR is used principally in general purpose tires.

The Buna® SE product portfolio contains adjusted types which fulfill the actual requirements for the tire industry in regard of environment friendly oils. Different stabilisation systems allows the customer to use the products in color sensitive applications

Applications

E-SBRs can be used in:

- tire
- retread
- footwear soles
- hoses, tubes, and cables
- conveyor belts
- other moulded, calendered and extruded rubber goods



PRODUCT PORTFOLIO

Name	Plant	Mooney [MML (1+4) @ 100 °C, MU]	Styrene [%]	Oil [phr]
Buna™ SE 1500	CAX	52	23.5	-
Buna™ SE 1502 H	TRI	53	23.5	-
Buna™ SE 1502 L	TRI	49	23.5	-
Buna™ SE 1793 (formally 1712 TE)	CAX	51	23.5	TRAE (37.5)
Buna™ SE 1799 (formally 1721 TE)	CAX	55	40.0	TRAE (37.5)
Buna™ SE 1783 TE	CAX	49	23.5	RAE (37.5)

TIRE AND SPECIALTY RUBBERS GLOBAL FOOTPRINT



WE ARE HAPPY TO SUPPORT YOUR BUSINESS

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