



MULTIPLIED PERFORMANCE

## Solution – Styrene Butadiene Rubber (S-SBR)

Solution polymerized styrene-butadiene rubber is obtained by the anionic polymerization of styrene and butadiene initiated by lithium alkyls in hydrocarbon solvent, the distribution of styrene units in the polymer chain results in either Block or Random Co-Polymers.

Block and Random S-SBRs impart very different properties to the polymer and are used in different applications. Block S-SBRs have a lower styrene content than Random S-SBRs and are more suitable for calendaring and extrusion processes. They are also used for bitumen modification and for the production of adhesive and High Impact Polystyrene (HIPS) and ABS resins. Random S-SBRs provide a versatile support for tailor-made product operating through the styrene content and microstructure of butadiene units allowing good performance in terms of processability, rolling resistance, grip and abrasion and becoming the first preference in the tyre sector.

### Europrene® SSBR

GRADE NAME	Polymerization Process	Bound	Block	Mooney Viscosity ML (1+4)@	Solution viscosity cPs	Main Applications
		Styrene %	Styrene wt%	100°C	(5% in styrene @25°C)	
EUROPRENE K SOL B 1205	BATCH	25	18	53	10	Calendered and extruded articles, cables, flooring, shoe soles, medium glossy HIPS
EUROPRENE K SOL B 183	BATCH	11	7	65	32	ABS
EUROPRENE K SOL R 72614 <sup>o</sup>	BATCH	25		55		Silica based compound for low rolling resistance and winter treads
EUROPRENE K SOL R C 2525	CONTINUOUS	26		54		Carbon black based compound for low rolling resistance treads, mechanical goods, footwear
EUROPRENE K SOL R C 2564 T <sup>o</sup>	CONTINUOUS	25		50		Silica based compound for low rolling resistance and winter treads
EUROPRENE K SOL R C 2564 T <sup>o</sup> - HM	CONTINUOUS	25		65		Silica based compound for low rolling resistance with improved wet grip
EUROPRENE K SOL R C 3737 T <sup>o</sup>	CONTINUOUS	37		75		Silica based compound for tyre tread with improved wet grip

<sup>o</sup> oil extended TDAE 37.5 p.h.r



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솔루션 스티렌-부타디엔 고무는 탄화수소 용매에서 리튬 알킬에 의해 촉진되는 스티렌과 부타디엔의 음이온 중합에서 얻어지며, 폴리머 사슬에서 스티렌의 분포에 따라서 블록 또는 랜덤 폴리머가 생성됩니다.

블록 및 랜덤 S-SBR은 중합체에 매우 다른 성질을 부여하고 다른 용도로 사용됩니다. 블록 S-SBR은 랜덤 S-SBR보다 낮은 스티렌 함량을 가지며 캘린더링 및 압출 공정에 더 적합합니다. 또한 비투먼 개질제, 접착제 및 고충격 폴리스티렌 (HIPS) 및 ABS 수지 생산에 사용됩니다.

랜덤 S-SBR은 가공성, 회전 저항, 그립성 및 내마모성 측면에서 우수한 성능을 발휘하게 하는 스티렌 함량 및 부타디엔 단위의 미세 구조를 통해 맞춤형 제품을 다양하게 제공할 수 있으며 타이어 부문에서 최우선적으로 사용되는 제품이 되었습니다.

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EUROPRENE K SOL R C 2564 T <sup>o</sup> - HM	CONTINUOUS	25		65		Silica based compound for low rolling resistance with improved wet grip
EUROPRENE K SOL R C 3737 T <sup>o</sup>	CONTINUOUS	37		75		Silica based compound for tyre tread with improved wet grip

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