

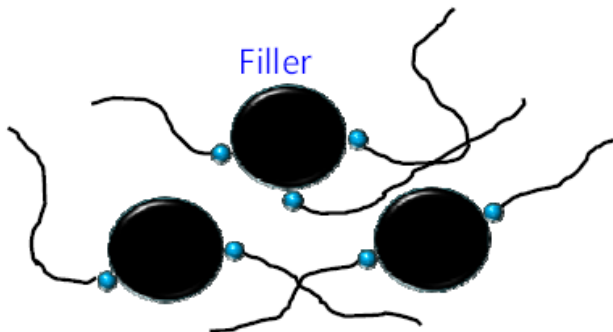
Solution SBR

Properties	ASTM Method	Condition	Unit	SSBR	
				PR-1205	PR-1322
Mooney	D-1646	—	MU	47 ± 5	125 ± 10
BD/SM	D-1416	—	%	75/25	70/30
Block Styrene	—	—	%	18	22
Volatile Matter	D-1416	—	%	≤ 0.75	≤ 0.75
Ash Content	D-1416	—	%	≤ 0.1	≤ 0.1
Solution Viscosity	D-445	5% Styrene solution	cps	10	25
Gel Content	CMD-D1-3310	—	Rating degree	≤ 3	≤ 3
Specific Gravity	D-792	23°C	—	0.94	0.94
APHA Color	D-1209	—	APHA	< 10	< 10
Package	—	—	Kg	35	35
Wrapping Film	—	—	Type	PE/ABS	PS
Application				Super High Gloss Hips/ Mass ABS	Mass ABS



Solution Styrene Butadiene Rubber (S-SBR)

S-SBR	Non-oil Extended		Oil Extended	
Grade	PR-2216	PR-3216	PR-5256	PR-6256
Mooney (MU)	63	63	55	60
Vinyl (%)	63	63	63	63
SM (%)	21	21	25	25
Tg (°C)	-22	-22	-28	-28
TDAE Oil (phr)	--	--	37.5	37.5
Application	Carbon Black	Silica	Carbon Black	Silica
Equivalent Grade	SSBR-G1	SSBR-J	SSBR-G2	SSBR-K



Rolling resistance ↓ (energy-saving)

Abrasion loss ↓ (durable)

Wet grip ↑ (safety)



Solution Styrene Butadiene Rubber (S-SBR)

Grade Name		Styrene Content (%)	Mooney Viscosity* 1)	Oil* 2)	(phr)	Features
SBR	TUFDENE™ 1000	18	45	---	---	Superior wear resistance, resilience, low temperature characteristics and groove crack resistance.
	TUFDENE™ 2000R	25	45	---	---	Good balance in tensile strength, wear resistance resilience and fluidity in processing.
	TUFDENE™ 2003	25	33	---	---	Low mill shrinkage and good fluidity in processing.
	TUFDENE™ 2100R	25	78	---	---	High green strength and low compression set. High loading is possible.
	TUFDENE™ 3830	33	65	37.5	37.5	Superior balance in rolling resistance, wet skid, and low temperature characteristics. Medium vinyl content.
	TUFDENE™ 3835	35.5	53	37.5	37.5	Superior dry and wet skid resistances suitable for high performance tread tire. Medium vinyl content.
	TUFDENE™ 4850	40	42.5	50	50	
	ASAPRENE™303	46	45	---	---	Low mill shrinkage. High hardness and bright color compounds.
	ASAPRENE™120 5	25	47	---	---	Low mill shrinkage and good fluidity in processing. Bright color compounds.
	ASAPRENE™650 0P	65	60* 3)	---	---	High hardness compounds. Superior transparency suitable for bright color compounds. Good roll processability.
E series (Modified SBR)	TUFDENE™ E580	35.5	69	37.5	37.5	Modified SBR having superior grip performance, low rolling resistance, wear resistance and low temperature performance especially in silica filled applications. Suitable for tire applications.

* 1) ML (1+4)100 °C * 2) Oil:low PCAoil (SRAE) * 3) ML(5+4) 100 °C

