



LION
ELASTOMERS

LION ELASTOMERS SBR

Duradene™ SSBR | Emulsion SBR | Specialty ESBR

With over 70 years of experience, Lion Elastomers produces the world's broadest line of emulsion styrene butadiene rubber (ESBR) for various applications ranging from tires to adhesives and sealants to industrial rubber goods. We are now adding Duradene™ SSBR to our line of products. With the hope of better servicing our industry, Duradene™ SSBR has applications in tires, as well as in extruded and molded rubber goods.

Duradene™ SSBR

Grade	AO	Bound Styrene	Block Styrene	Vinyl	TG	Base ML/4	Specific Gravity
706	NS	23.5	---	---	-62	55	0.93

Emulsion SBR

COLD TYPES

Grade	Emulsifier	Stabilizer	Bound Styrene (%)	MML 1+4
1500	RA	S	23.5	51
1502	MA	NS	23.5	52
1502L	MA	NS	23.5	41
1507	MA	NS	23.5	35

COLD OIL EXTENDED TYPES

Grade	Emulsifier	Stabilizer	Bound Styrene (%)	MML 1+4	Oil Type	Oil Parts
1712*	MA	S	23.5	45	Hi-AR	37.5
1732N*	MA	S	32.0	46	NAPH	32.5
1763	MA	S	23.5	50	NAPH	37.5
1769	MA	S	40.0	50	NAPH	37.5
1778	MA	NS	23.5	52	NAPH	37.5
1783	MA	S	23.5	52	RAE	37.5
1783L	MA	S	23.5	45	RAE	37.5
1789	MA	S	40.0	52	RAE	37.5

BLACK MASTERBATCH TYPES

Grade	Emulsifier	Stabilizer	Bound Styrene (%)	UMS	Oil Type	Oil Parts	Black Type	Black Parts
1605	FA	NS	23.5	65	-	-	N550	50.0
1686	RA	S	23.5	47	RAE	10.0	N330	52.0
4684*	MA	S	23.5	63	Hi-AR	10.0	N234	52.0

(*) Available on demand only

Note: The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are implied. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. No warranty is made that any use or application of any product does not involve infringement of patents of others.

Specialty ESBR

HOT SBR BALE, NON-CROSSLINKED GRADES (*) Typical

	Emulsifier	Solution* Viscosity (cP)	Bound Styrene (%)	MML* 1+4	CML* 1+4	Tensile* (psi)	Elongation*	Modulus* 300% (psi)	Specific Gravity	Remarks
1006	FA	n/a	23.5	49	60	3350	380	2400	0.94	Higher filler loading; Brake lining, floor tile and lamination adhesive applications
1011AC	RA	430-810^^	23.5	54	67	3500	480	2000	0.94	General purpose pressure-sensitive adhesives, labels, tapes
1011AE	RA	n/a	23.5	54	62	3050	440	1950	0.94	High tack - pressure sensitive tape adhesives - tire bead wire, PSA
1012	FA	200^	23.5	120	122	3900	350	3250	0.94	High viscosity, high cohesive strength
1013	FA	n/a	43.5	45	53	3250	340	2900	0.96	Low water absorption - high bound styrene - high green strength; PVC tape

HOT SBR BALE, CROSSLINKED GRADES (*) Typical

	Emulsifier	Solution* Viscosity (cP)	Shrinkage* Max (%)	Bound Styrene (%)	MML* 1+4	CML* 1+4	Tensile* (psi)	Elongation*	Modulus* 300% (psi)	Specific Gravity	Remarks
1009	FA	120-400^	35	23.5	37	n/a	2050	310	2000	0.94	Adhesive grade, automotive sealants, caulking
1009AF	FA	n/a	10	23.5	48	n/a	1350	210	n/a	0.94	Mechanical goods - controls shrinkage, aerosol spray

HOT SBR CRUMB, NON-CROSSLINKED (*) Typical

	Emulsifier	Solution* Viscosity (cP)	Bound Styrene (%)	MML* 1+4	CML* 1+4	Tensile* (psi)	Elongation*	Modulus* 300% (psi)	Specific Gravity	Remarks
1006C	FA	n/a	23.5	49	60	3350	380	2400	0.99	General purpose and laminating adhesives, brake lining
1012C	FA	200^	23.5	120	122	3900	340	3250	0.99	Higher cohesive strength; Binder for fibers

HOT SBR CRUMB, CROSSLINKED GRADES (*) Typical

	Emulsifier	Solution* Viscosity (cP)	Shrinkage* Max (%)	Bound Styrene (%)	MML* 1+4	CML* 1+4	Tensile* (psi)	Elongation*	Modulus* 300% (psi)	Specific Gravity	Remarks
1009C	FA	120-400^	35	23.5	37	n/a	n/a	n/a	n/a	0.99	Pre-crosslinked types, construction and spray adhesive, die swell control
1009AFC	FA	n/a	10	23.5	48	n/a	n/a	n/a	n/a	0.99	For shrinkage and die swell control during extrusion and calendaring, aerosol adhesive
4503C	RA	110-400^	35	30.0	50	86	n/a	n/a	n/a	0.99	Offers same properties as blending 1009 and 1013

FA - fatty acid; RA - rosin acid

All stabilizers used in specialty SBR grades are non-staining (NS)

^Solution viscosity in Toluene at 4% elastomer by weight

^^Solution viscosity in Toluene at 10% elastomer by weight

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