## Styrene Butadiene Latex / SBL

Styrene butadiene latex (SBL) exhibits excellent chemical and mechanical stability, strong adhesiveness, and excellent printability, making it suitable to a wide range of industrial applications in addition to paper coating applications, including use as foam rubber, carpet backing, and adhesives between fiber and rubber, etc.

## **Chemical Structure**

- SBL is a synthetic rubber latex with the principal components being styrene and butadiene.
- It is a water-based emulsion, which makes handling easy and safe, so it is used in a wide range of applications.
- It is a liquid with a milky white appearance and uniform, perfectly spherical particles dispersed stably in water.
- Its glass transition temperature (hardness) and polarity can be adjusted through the composition ratio.
- Particle surface can be a modified type, through the addition of acid monomers and other functional groups, or non-modified type.

## **Properties**

- Low viscosity even when degree of polymerization (molecular weight) is increased
- Low viscosity even when concentration is increased
- Fast drying and film formation
- Easy and safe to handle

Grade	Total solid content (%)	рН	BF viscosity* (mPa • S)	Polymer glass transition temperature (Tg) (°C)	Average particle size (nm)	Surface tension (mN/m)	Emulsion type
SBL 0696	48	7.7	90	-12	170	55	Carboxy-modified type
SBL 0561	69	10.3	440	-63	700	32	-
SBL 0589	50	9.3	60	0	220	38	-
SBL 2108	40	11	45	-66	80	58	-
SBL 0533	50	8.3	390	-20	105	34	Carboxy-modified type
SBL 0545	54	8	250	-31	120	54	Carboxy-modified type
SBL 0548	50.5	7.9	160	-49	95	49	Carboxy-modified type
SBL 0568	50	8	220	-23	115	58	Carboxy-modified type
SBL 0569V	48	8.7	240	-4	100	55	Carboxy-modified type
SBL 0573	48	7.5	60	-9	225	60	Carboxy-modified type
SBL 0597C	48	8.2	175	28	125	40	Carboxy-modified type
SBL 0850Z	50	7	250	7	135	53	Carboxy-modified type
SBL 2527A	50	7.2	190	-28	85	41	Carboxy-modified type Oil resistance-improved type

<sup>\*</sup> Viscosity measurement parameters: 60 rpm