



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 ^o | 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 ^o | CONTINUOUS | 25 | | 50 | | Silica based compound for low rolling resistance and winter treads |
| EUROPRENE K SOL R C 2564 T ^o - HM | CONTINUOUS | 25 | | 65 | | Silica based compound for low rolling resistance with improved wet grip |
| EUROPRENE K SOL R C 3737 T ^o | CONTINUOUS | 37 | | 75 | | Silica based compound for tyre tread with improved wet grip |

^o oil extended TDAE 37.5 p.h.r



MULTIPLIED PERFORMANCE

溶聚丁苯橡胶(S-SBR)

溶聚丁苯橡胶(SSBR),是由苯乙烯和丁二烯在烃类溶剂中于烷基锂的引发下进行阴离子聚合而成。苯乙烯结构单元在聚合物链上的不同分布,导致形成嵌段共聚物或无规共聚物。

嵌段共聚和无规共聚SSBR赋予聚合物截然不同的性能,从而适合于不同的应用。嵌段共聚SSBR的苯乙烯含量低于无规共聚SSBR,更适合于流延和挤出工艺。它也被用于沥青改性以及生产胶黏剂、高抗冲聚苯乙烯(HIPS)和ABS树脂。对于无规共聚SSBR,则可以通过控制苯乙烯含量和丁二烯单元的微观结构,为各种定制产品提供多方面的优异性能,例如加工性、防滑性、抓地力和耐磨性等,因而是轮胎行业的首选。

Europrene® SSBR 溶聚丁苯

| 牌号 | 聚合工艺 | 结合苯乙烯含量, % | 苯乙烯嵌段含量, wt% | 门尼粘度 ML (1+4)@ | 溶液粘度 cPs | 主要应用 |
|--|------|------------|--------------|----------------|------------------|---|
| | | | | 100°C | (25°C,于5%苯乙烯溶液中) | |
| EUROPRENE K SOL B 1205 | 间歇法 | 25 | 18 | 53 | 10 | 流延及挤出制品, 线缆, 地板, 鞋底, 中等光泽的高抗冲聚苯乙烯(HIPS) |
| EUROPRENE K SOL B 183 | 间歇法 | 11 | 7 | 65 | 32 | ABS |
| EUROPRENE K SOL R 72614 ^o | 间歇法 | 25 | | 55 | | 含白炭黑且用于低滚动阻力和冬季用途的胎面胶 |
| EUROPRENE K SOL R C 2525 | 连续法 | 26 | | 54 | | 含炭黑且用于低滚动阻力的胎面胶, 模压制品, 鞋材 |
| EUROPRENE K SOL R C 2564 T ^o | 连续法 | 25 | | 50 | | 含白炭黑且用于低滚动阻力和冬季用途的胎面胶 |
| EUROPRENE K SOL R C 2564 T ^o - HM | 连续法 | 25 | | 65 | | 低滚动阻力并提升湿地抓地力的白炭黑配方 |
| EUROPRENE K SOL R C 3737 T ^o | 连续法 | 37 | | 75 | | 提升湿地抓地力的用于高性能/超高性能轮胎胎面的白炭黑配方。 |

^o 填充有37.5 phr的环保芳烃油