

Home

What's new

Brochures

Applications

Products

Tech guides

[Tuftec™](#)
[S.O.E.™](#)
[Tufprene™ & Asaprene™^T](#)
[Asaflex™](#)
[Asadene™ & Tufdene™ & Asaprene™](#)
[E series](#)

Home > [Products](#) > [TUFPRENE™ & ASAPRENE™](#) > Tables of TUFPRENE™ and ASAPRENE™ Grades and Properties

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Product Information Tufprene™ & Asaprene™

Tables of TUFPRENE™ and ASAPRENE™ Grades and Properties

TUFPRENE™ styrenic thermoplastic elastomer					
Grade No.			<u>A</u>	<u>125</u>	<u>126S</u>
Special characteristics			High hardness	High hardness High flowability	High hardness High flowability Anti-blocking property
Property	Method	Units			
Density	ISO1183	g/cm ³	0.95	0.95	0.95
MFR 190°C, 2.16kg	ISO1133	g/10 min	2.6	4.5	4.5
MFR 200°C, 5kg		g/10 min	13	20	20
Hardness, Durometer Type A	ISO7619	-	85°	88°	91°
Tensile strength	ISO37	MPa	14	20	25
Elongation		%	1,100	800	790
300% tensile stress		MPa	2.5	4.3	4.5
Viscosity as 25% solution in toluene		mPa.s	650	570	440
Styrene/butadiene ratio		wt%	40/60	40/60	40/60
Product form			Pellet	Pellet	Pellet
Typical applications			Press.-sens. adhesives PS modification Asphalt modification	PS modification	PS modification

¹ Reactive resin grade

Test conditions

- Test piece: Compression-molded sheet, 2-mm thick, type1A dumbbell shape.
- Roll kneading temp.: 120°C~130°C.
- Compression molding: Preheating, 160°C 5 min. Compression: 80 kg/cm² 160°C 5 min. Cooling: 3 min.
- Test measurements temp.: 23°C.

Please note that all data and values are given as typical results obtained with the indicated test methods for purposes of basic reference in grade selection only, and not as any product specification or warranty of any nature, and are subject to change without notice.

ASAPRENE™ styrenic thermoplastic elastomer							
Grade No.			T-411	T-432	T-437	T-438	T-439
Special characteristics			High viscosity High elasticity	High rigidity High flowability	High strength	High flowability	High flowability
Property	Method	Units					
Density	ISO1183	g/cm ³	0.94	0.94	0.94	0.94	0.95
MFR 190°C, 2.16kg	ISO1133	g/10 min	0	0	-	-	-
MFR 200°C, 5kg			0	0.2	2	25	-
Hardness, Durometer Type A	ISO7619	-	75°	75°	75°	80°	83°
Tensile strength	ISO37	MPa	20	30	31	5	6
Elongation		%	750	750	890	1,150	880
300% tensile stress		MPa	2.3	2.0	2.3	3.0	4.0
Viscosity as 25% solution in toluene		mPa.s	20,200	3,100	1700	470	170
Viscosity as 15% solution in toluene		mPa.s	-	330 ¹	-	47.5 ¹	25 ¹
Viscosity as 10% solution in toluene		mPa.s	270 ¹	-	-	-	-
Styrene/butadiene ratio		wt%	30/70	30/70	30/70	35/65	45/55
Oil content (parts)			-	-	-	-	-
Product form			Crumb Powder (G) ²	Crumb Powder (G) ²	Crumb	Pellet	Pellet
Typical applications			Adhesives ³ Asphalt modification Shoe MC ⁴	Adhesives ³ Asphalt modification	Asphalt modification	Adhesives ³	Adhesives ³

¹ Specification² Ground products: G, 20-mesh pass.³ Pressure-sensitive and other adhesives .⁴ Footwear molding compounds .

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[To top](#)