



[Home](#) > [Products](#) > [Tuftec™](#) > Table of Tuftec™ Grades and Properties

 Product Information

Table of Tuftec™ H Grades and Properties

Click on Grade No. for basic profile

Tuftec™ H hydrogenated styrenic thermoplastic elastomers														
				Grade No.	H1031	H1041	H1043	H1051	H1052	H1053	H1062	H1141	H1221	H1272
Property	Test method	Test cond.	Units											
Specific gravity	ASTM D 297	-	-	0.91	0.91	0.97	0.93	0.89	0.91	0.89	0.91	0.89	0.90	
MFR	ASTM D 1238	230°C, 2.16 kg	g/10 min	150	5.0	2.0	0.8	13	1.8	4.5	140	4.5	-	
		200°C, 5 kg	g/10 min	80	3.5	5.0	0.5	10	-	-	-	-	-	
		190°C, 2.16 kg	g/10 min	17	0.3	-	-	3	-	-	22	-	-	
Hardness	JIS K 6253	Durometer Type A	-	82	84	72* ¹	96	67	79	67	84	42	35	
Tensile strength	JIS K 6251	#3 dumbbell, 500 mm/min	MPa	12.7	21.6	10.3	32.3	11.8	24.6	15	2.7	9.5	18.6	
Elongation			%	650	650	20* ²	600	700	550	670	520	980	950	
300% tensile stress			MPa	3.2	3.4	-	8.3	2.5	4.8	4.3	2.8	1.0	1.0	
Heat - aging resistance	ISO 188	Normal oven method 120°C, 168 hr	Tensile strength retention	%	-	97	99	-	99	98	97	100	-	98
			Elongation retention	%	-	101	96	-	98	98	100	97	-	99
			Discoloring	-	-	L/N	L/N	-	L/N	L/N	L/N	L/N	-	L/N
S/EB ratio	Asahi Kasei method	-	wt%	30/70	30/70	67/33	42/58	20/80	29/71	18/82	30/70	12/88	35/65	
Product form				Pellet	Pellet	Pellet	Pellet	Pellet	Pellet	Pellet	Pellet	Pellet	Pellet	

L/N: Little or none; absent or generally negligible for most purposes.

*¹ Type D. *²#3 dumbbell, 10 mm/min

Table of Tuftec™ M Grades and Properties

*Click on Grade No. for basic profile***Tuftec™ M modified hydrogenated styrenic thermoplastic elastomers**

Grade No.				M1911	M1913	M1943
Special characteristics				Low acid group	High acid group	Low-styrene High acid group
Property	Test method	Test cond.	Units			
Specific gravity	ASTM D 297	-	-	0.91	0.92	0.90
MFR (L)	ASTM D 1238	230°C, 2.16 kg	g/10 min	4.5	5.0	8.0
MFR (G)		200°C, 5 kg	g/10 min	3.5	4.0	6.0
Hardness	JIS K 6253-1993	Durometer Type A	-	84	84	67
Tensile strength			MPa	22	22	11
Elongation	JIS K 6251-1993	#3 dumbbell, 500 mm/min	%	650	600	650
300% tensile stress			MPa	4.1	4.4	2.9
Tensile modulus	JIS K 7113-1981	10 mm/min	MPa	20	25	6.9
Heat-aging resistance	Tensile strength retention		%	99	98	99
	Elongation retention	ISO 188 Normal oven method 120°C, 168 hr	%	96	95	96
	Discoloring		-	L/N	L/N	L/N
Acid value	Titration method	-	mg CH ₃ ONa per g polymer	2	10	10
S/EB ratio	Asahi Kasei method	-	wt%	30/70	30/70	20/80
Product form				Pellet	Pellet	Pellet

Typical applications: Excellent graft and polymer reaction with reactive compounds and polymers bearing reactive groups; improvement of resin impact strength and other characteristics. Improvement of polymer adhesion to metals.

L/N: Little or none; absent or generally negligible for most purposes.

Table of Tuftec™ P Grades and Properties*Click on Grade No. for basic profile***Tuftec™ P selectively hydrogenated styrenic thermoplastic elastomers**

Grade No.				P1500	P2000	MP10
Property	Test method	Test condition	Units			
Specific gravity	ASTM D 297	-	-	0.94	0.98	0.91
MFR (E)	ASTM D1238	190°C, 2.16kg	g/10 min	4	3	-
Hardness	JIS K 6253-1993	Durometer Type A	-	69	74* ¹⁾	89

Tensile strength			MPa	3.3	24.5	28
Elongation	JIS K 6251-1993	#3 dumbbell, 500 mm/min	%	780	42	600
300% modulus			MPa	2.1	-	5.6
Viscosity as 15% solution in toluene		-	cP	35	-	-
S/BB ratio	Asahi Kasei method	-	wt%	30/70	67/33	30/70
			Product form	Pellet	Pellet	Pellet

*¹⁾ Type D

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.

[To top](#)

