

Estane[®] Injection Moulding Compounds

Physical properties (Typical values)*	Unit	Test standard	54351 NAT 021	54353 NAT 021	58280 NAT 021	58881 NAT 028	58300 NAT 033	58315 NAT 033	58214 NAT 021	58311 NAT 022	58887 NAT 023	58212 NAT 022	58144 NAT 026
Polyester/ether			capa	capa	ether	ether	ether	ether	ether	ether	ether	ether	Ether
Shore hardness (3 sec.)	A/D	ISO 868	84/-	90/-	78/-	80/-	80/-	85/-	85/-	87/-	88/-	95/46	-/60
Specific gravity	g/cm ³	ISO 2781	1.16	1.17	1.06	1.1	1.1	1.12	1.11	1.12	1.13	1.15	1.17
Tensile Strength	MPa	ISO 37	42	55	29	23	28	37	35	42	45	36	44
Tensile stress @													
50% elongation	MPa	ISO 37	4.3	6.6	3.2	3.5	4.1	5	5	4.9	6	10	17.5
100% elongation	MPa	ISO 37	5	7.7	4.4	4.6	5.4	6	6	5.9	7.1	11.4	20.1
300% elongation	MPa	ISO 37	7.5	13	7.8	6.6	8.3	9	9	9.1	11	18.4	31.8
Elongation at Break	%	ISO 37	530	590	720	810	725	650	650	655	610	530	410
Tensile modulus	MPa	ISO 527	20	40	11	12	15	23	20	21	29	56	210
Flexural modulus	MPa	ISO 178	-	-	-	-	-	-	-	-	-	-	-
Compression set													
70 hrs./22°C	%	ISO 815	25	28	16	21	32	27	27	27	30	30	36
24 hrs./70°C	%	ISO 815	60	61	40	64	70	70	70	70	75	70	60
Tear Resistance													
without incision	KN/m	ISO 34B											
with incision	KN/m	ISO 34B	65	80	50	38	50	55	55	55	65	95	160
Abrasion loss	mm ³	ISO 4649	30	40	30	92	70	35	45	35	45	40	50
Rebound Resilience	%	ISO 4662	30	22	72	56	50	40	40	40	40	25	34
Vicat temperature A50	°C	ISO 306	66	88	-	-	60	72	67	73	79	80	105

Note : All test samples were die-cut from injection moulded plaques with thickness 2 mm and 6 mm respectively. Prior to testing, all samples were conditioned for 48 hours @23°C and 55% RH.

(*) Please be aware that listed values are "typical (average) values" and should/can not be applied for specification purposes.