

# HD and SL Molding Materials – Thermosets



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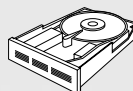
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# HD and SL Molding Materials - Thermosets

ISOLOSS HD elastomers exhibit excellent load bearing strength, compression-set resistance and stiffness stability over a broad

temperature range. ISOLOSS SL series elastomers are highly damped, low modulus, thermoset compounds with exceptional molding stability.

Both materials exhibit high internal damping, excellent resistance to creep and compression and can be metal-bonded during molding.

Typical Properties						
Property	ISOLOSS HD	SL-20100	SL-25200	SL-35100	SL-50100	SL-60100
<b>Description</b>	Urethane Solid Thermoset	Synthetic Rubber	Synthetic rubber	Synthetic Rubber	Synthetic Rubber	Synthetic Rubber
<b>Hardness</b> ASTM D2240 Shore A Durometer 23C (73F) 5 sec impact						
15 sec impact	58	21	27	35	50	60
<b>Flammability</b> UL 94 0.15 cm (0.06 in thick) 0.32 cm (0.125 in)	Listed HB	Meets V-0				
FMVSS-302	Meets at 0.32 cm (0.125 in)					
FAR 25.853 (a) Appendix F Part I (a) (1) (ii) (12 sec)						
<b>Compression Load Deflection kPa (psi)</b> ASTM D575 at 0.51 cm/min (0.2 in/min)						
10% kPa (psi)	565 (82)	124 (18)	179 (26)	248 (36)	407 (59)	897 (130)
20% kPa (psi)	1241 (180)	241 (35)	352 (51)	497 (72)	780 (113)	1829 (265)
30% kPa (psi)	2103 (305)	393 (57)	565 (82)	780 (113)	1207 (175)	3043 (441)
<b>Compression Set (%)</b> ASTM D395 Method B 22 hr at 22C (72F)	4.5	3	5	2	3	6
22 hr at 70C (158F)	6.1	8	8	9	7	16
<b>Tensile Strength kPa (psi)</b> ASTM D412	8963 (1300)	3653 (530)	4384 (636)	6120 (888)	9422 (1367)	8974 (1302)
<b>Tear Strength kN/m (lbf/in)</b> ASTM D624	38 (218)	12.2 (69)	15.6 (88)	17.8 (101)	26.0 (147)	40.0 (227)
<b>Temperature Range C</b> Peak Damping Performance Temperature Range						
@ 10 HZ	7 to 25	-9 to 16	-9 to 12	-3 to 20	5 to 29	6 to 27
@ 100 HZ	15 to 38	-2 to 31	-3 to 26	5 to 34	12 to 41	13 to 39
@ 1000 HZ	26 to 56	8 to 51	8 to 45	14 to 52	23 to 56	22 to 55
Recommended Maximum Intermittent Temperature	107C (225F)	100C (212F)	100C (212F)	100C (212F)	100C (212F)	100 C (212F)
Maximum Continuous Service Temperature	90C (194F)	70C (158F)	70C (158F)	70C (158F)	70C (158F)	70C (158F)
<b>RoHS Compliant</b>	Yes	Yes	Yes	Yes	Yes	Yes

The data listed in this materials summary are typical or average values based on tests conducted by independent laboratories or by the manufacturer. They are indicative only of the results obtained in such tests and should not be considered as guaranteed maximums or minimums. Materials must be tested under actual service to determine their suitability for a particular purpose.