

Damping Materials

ISODAMP® damping materials offer practical, effective solutions for impact noise and structureborne vibration.

The broad range of ISODAMP damping materials affords high-performance vibration control under diverse physical, temperature and environmental conditions.

There is an ISODAMP damping material specifically designed to prevent ringing in lightweight precision equipment frames, reduce hydrodynamic vibrations in massive ship hulls—or almost anything in between.

- Complete range of materials available
- Exhibit excellent physical properties
- Minimum weight with maximum performance

- Excellent flame resistance—specific styles to meet UL94 V-0, FAR, ATS and QPL MIL specifications
- Available with pressure-sensitive adhesive backing, in sheet or die-cut form
- Choices available for discrete thickness and temperature regimes
- Available for extensional, composite and constrained-layer systems

Typical Properties

Property	SD	C-2003	C-2206	CN	NV-7500S	C-3201	C-3202
Density Nominal kg/m³ (lb/ft³)							
ASTM D792	1682 (105)	1714 (107)	1682 (105)	1490 (93)	2163 (135)	104 (6.5)	104 (6.5)
Flammability							
UL 94	Listed V-0	Listed HB	Listed V-0	Meets V-0	Listed V-0	Meets HBF	Meets HBF
Far 25.853(a) Appendix F Part I (a) (1) (ii) (12 sec)	Meets					Meets	Meets
FMVSS-302	Meets	Meets	Meets	Meets	Meets	Meets	Meets
Canadian Stds. Assoc. (CSA)	Listed 0.6 V-0	Listed 0.6 HB	Listed 0.6 V-0				
System Loss Factor at 1000 Hz on 62 mil Aluminum						(With 5 mil aluminum constraining layer)*	(With 5 mil aluminum constraining layer)*
Thickness cm (in)	.102 (.040)	.127 (.050)	.076 (.033)	.152 (.060)	.190 (.075)	.635 (.25)	.635 (.25)
ASTM E756-93							
@ 0C (32F)	.064	.072	.062	.140	.127	.210	.380
@ 10C (50F)	.105	.130	.096	.270	.235	.097	.280
@ 20C (68F)	.143	.140	.115	.210	.174	.059	.150
@ 30C (86F)	.110	.084	.087	.120	.110		
Tensile Strength kPa (psi)							
ASTM D638	8798 (1276)	16554 (2401)	9632 (1397)	13700 (1987)	8966 (1300)	262 (38)	324 (47)
Tear Strength kN/m (lbf/in)							
ASTM D1004-93	51 (292)	44 (252)	58 (332)	66 (375)	45 (254)		
ASTM D3574						.42 (2.4)	.56 (3.2)
Elongation (%)							
ASTM D638	14	61	31	23	36	120	160
Temperature Range C (F)							
Peak Performance	-18C to 71C (0F to 160F)	0C to 52C (32F to 125F)	-18 C to 71C (0F to 160F)	2C to 46C (35F to 115F)	-10C to 60C (14F to 140F)	-30C to 20C (-22F to 68F)	-15C to 35C (5F to 95F)
Recommended Max. Intermittent	107C (225F)	107C (225F)	107C (225F)	107C (225F)	125C (257F)	107C (225F)	107C (225F)
RoHS Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*Tested on 40 mil Aluminum

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.