E-A-R™

ISOLATION MATERIALS

Material Summary Sheet 6

Offering solutions for a wide range of applications such as...

- Lab and office equipment
- Computers and peripherals
- Telecommunications and electronics
- Industrial equipment
- Automobiles

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Isolation Materials

The high internal damping of the ISODAMP™ vinyl and ISOLOSS™ urethane material families reduces mechanically or acoustically induced vibrations and dissipates shock and impact energy at a very rapid rate.

These properties—in conjunction with excellent physical strength, flexibility, and good environmental and flame resistance—make E-A-R isolation materials ideal for constrained layer damping, damped isolation and impact control applications.

- *Highly effective damped isolation materials for source control of noise, vibration and shock*
- *High-performance constrained layer damping in harsh environments*
- *Tough, yet soft and flexible—conform to irregular and pitted surfaces*
- *Flame resistant, with excellent wear and physical properties*
- *Control unwanted motion and rebound in equipment of all types*
- *Low rebound properties—prevent additive effects of successive impacts*
- *Available in many forms—sheets, rolls, die-cut and c ustom-molded parts*

TYPICAL PROPERTIES

PROPERTY	ISODAMP C-1002	ISODAMP C-1100
Description	Vinyl Solid	Vinyl Solid
Hardness Nominal ASTM D2240 15 sec post impact at 23C (73F) Type A Durometer	54	71
Flammability UL 94 1.5 mm (0.06 in) thick	Listed V-0	Listed V-0
MVSS-302	Meets at 0.38 mm (0.015 in)	Meets at 1.5 mm (0.060 in)
Dynamic Properties ASTM D4065 at 10 Hz, 0.3% Amplitude Glass Transition Temperature	-15C (5F)	3.2C (38F)
Compression Set (%) ASTM D395 Method B 22 hr at 22C (72F)	16	15
22 hr at 70C (158F), *50C(122F)	58	60
Compression Load Deflection kPa (psi) ASTM D575 at 0.51 cm/min (0.2 in/min) 10% kPa (psi)	393 (57)	1076 (156)
20% kPa (psi)	1145 (166)	3309 (480)
30% kPa (psi)	2468 (358)	6971 (1011)
Tensile Strength kPa (psi) ASTM D638 51cm/min (20 in/min) at 22C (72F)	8963 (1300)	13665 (1982)
Tear Strength kN/m (lbf/in) ASTM D624	35 (197)	63 (359)
Temperature Range C (F) Peak Damping Performance Temperature Range ASTM D4065 Loss Factor above 0.3% Strain in Shear Mode at 10Hz	-13C to 37C (9F to 99F)	5C to 63C (41F to 145F)
Recommended Maximum Intermittent Temperature	82C (180F)	82C (180F)
Maximum Continuous Service Temperature	70C (158F)	70C (158F)
RoHS Compliant	Yes	Yes

The data listed in this data sheet 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.

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