

Technical Information Sheet – TIS 09

Energy Absorption Capacity of Azote® Foams

Energy absorption of foam materials can be important for application where the foam is used to protect an item or person from impacts. This energy absorbed by a foam is dependent on a range of variables including the raw material, the density, the impact speed and the thickness of the foam under test. Generally the stiffer and more dense a foam is the greater the energy it can absorb.

The data presented in the table below has been obtained from compression deflection measurements taken at a velocity of 100 mm/min with a sample size of 100mm x 100mm x 30mm. These values are intended for guidance only as they are based on one off test results.

Dynamic performance will be similar, with energy absorption capacity slightly enhanced.

Grade	Energy Absorbed J/cm ³						
	Compression						
	10%	20%	30%	40%	50%	60%	70%
Plastazote® LD24	0.002	0.006	0.012	0.019	0.029	0.043	0.064
Plastazote® LD33	0.003	0.008	0.015	0.024	0.036	0.052	0.078
Plastazote® LD45	0.005	0.013	0.022	0.034	0.048	0.067	0.095
Plastazote® LD60	0.011	0.026	0.042	0.061	0.083	0.123	0.149
Plastazote® LD70	0.010	0.028	0.046	0.067	0.092	0.111	0.168
Plastazote® HD30	0.011	0.025	0.039	0.056	0.075	0.098	0.129
Plastazote® HD60	0.035	0.085	0.134	0.185	0.243	0.312	0.403
Plastazote® HD80	0.047	0.124	0.202	0.281	0.366	0.468	0.601
Plastazote® HD115	0.060	0.168	0.275	0.383	0.501	0.641	0.821
Evazote® EV50	0.002	0.005	0.011	0.018	0.027	0.042	0.063

Please contact our technical Support team if you require any further information on this topic.

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