

Liberty Ground Protection Mat Product Specifications Sku # Liberty

Tile Size: 7 ft-11 in x 3 ft-11 in x 1/2 inch thick, 29.06 square feet per tile
 Tile Weight: 77 lb. per tile
 Material: 100% recycled Low Density Polyethylene (LDPE)

Technical Product Information

Mechanical Properties	Unit	LDPE
Tensile strength	MPa	23-26
Flexural strength	MPa	25 - 28
Flexural modulus	MPa	1936 - 1967
Charpy Notched		
Impact Strength	kJ/m ²	5 - 6
Poisson's ratio (theoretical)		0.35 - 0.38
Compression testing (max value)	Tons	250

General Properties

Density	kg/m ³	940 - 965
Shrinkage	%	2 - 4
Water absorption	%	0.01
Thermal expansion	e-6/K	110 - 130
Thermal conductivity	W/m.K	0.46 - 0.52
Specific heat	J/kg.K	1800 - 2700
Melting temperature	F	226 - 273
Glass temperature	F	-230 - -230
Service temperature	F	-86 - +185
Resistivity	Ohm.mm ² /m	5e+17 - 1e+21
Breakdown potential	kV/mm	17.1 - 19.7
Dielectric loss factor		0.0005 - 0.0008
Friction coefficient		0.25 - 0.30
Refraction index		1.52 - 1.53

Health and Safety Information

Critical hazards to man and environment	None
Environment	The disposal of the material presents no danger regarding toxicological or ecological considerations. Due to low water solubility, bio-availability unlikely.
Solubility in water	Insoluble
Regulatory	Not classified as hazardous under transport regulations.
Melting point	Crystalline Melt Temperature 226 - 273 ° F
Ignition temperature	> 680° F
Thermal decomposition	> 734° F
Stability and reactivity	No possibility of degradation under normal circumstances. Degradation will only occur above the decomposition temperature.
Toxicology	Not harmful to health under normal conditions.