



*Protective Packaging Materials Specialist*

**PROPERTIES OF P.E FOAM**

CLASSIFICATION	ITEMES	UNIT	P.E FOAM	REMARKS
CELL STRUCTURE	DENSITY	G/cm <sup>3</sup>	0.025 ~ 0.040	
	CELL SIZE	MM	0.26 ~ 0.33	
	CROSSED CELL RATIO	%		
PHYSICAL PROPERTIES	TENSILE STRENGTH	Kg/cm <sup>2</sup>	2.2 ~ 3.4	
	ELONGATIO N	%	190 ~140	
	COMPRESSION 10 %	Kg/cm <sup>2</sup>	0.030	
	COMPRESSION 20 %	Kg/cm <sup>2</sup>	0.197	
	COMPRESSION 30 %	Kg/cm <sup>2</sup>	0.787	
	PERMANENT COMPRESSION SET	%	6.5	
	REPEATED COMPRESSION SET	%	5.0	
	TEARING STRENGTH	Kg/cm <sup>2</sup>	2.2 ~ 2.4	
	COMPRESSION STRENGTH	Kg/cm <sup>2</sup>	0.52 ~ 1.6	
	RESILIENCY	%	30 ~ 35	
THERMAL PROPERTIES	HEAT DISTORATION TEMPERETURE	°c	-70 ~ 80	
	THERMAL CONDUCTIVITY	Kcal/m	0.027 ~	
		Hr °c	0.040	
	HEAT SHRINKAGE	%	-2.3 ~ 0.4	
	COEFFICIENT OF LINEAR EXPANSION	1/°c	17 x 10 <sup>-5</sup>	
	COMBUSTIBILITY			
	COMBUSTION RATE	Cm/min	6.4 ~ 10.0	
INSULATION				
WATER RESISTANCE PROPERTIES	WATER ABSORPTION	Mg/cm <sup>2</sup>	0.03	
	WATER VAPOR TRANSMISSION RATE	G/m <sup>2</sup> hr	0.01	
	MOISTURE TRANSMISSION RATE	G/m <sup>2</sup>	4.62	
	PHENOMENON	24hr		
	WATER RESISTANCE MOISTURE RESISTANCE			
ELECTRIC CHARATER	DIELECTRIC CONSTANT	ε (1khz)	1.05 ~ 1.58	Antistatic
	VOLUME RESISTIVITY	Ω/cm	10 <sup>4</sup>	Item
	DIELECTRIC STRENGTH	Kt/mm	4.8	
	DISSIPATION FACTOR	Tanδ(1khz)	0.0001	
OTHER PROPERTIES	BUOYANCY	G/l	880	
	CLARITY	%	45	