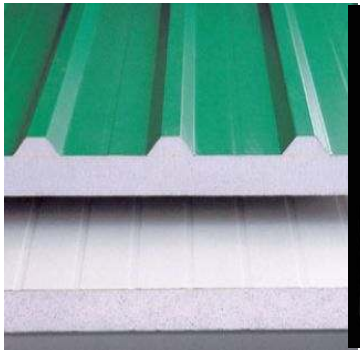
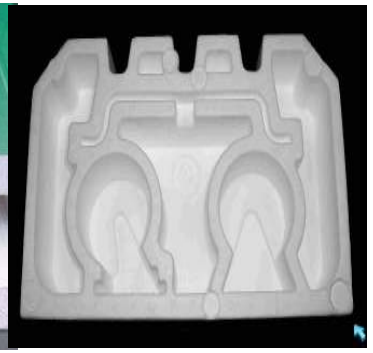
EPS (Expandable Polystyrene)

It is a white polystyrene bead with a blowing agent.
The application of EPS;
the expanded polystyrene foam is used for isolation board and packing material for shock-absorbing.

LG EPS

LG Chem. produces mainly two types of EPS resin as general and flame retardant in the same process. The flame retardant type and normal type are distinguished by the recipes.
The EPS plant has attained international recognition for own product's qualities with the acquisition of ISO 9001 certification.

EPS Composition & General

- Poly Styrene : 92~94 %
- Blowing Agent : 5.5~7 %
- Residual Ethyl Benzene : Max. 500 ppm
- Coating agent : 2,000~4,000 ppm
- Moisture content : Max. 0.7%

EPS General

- Appearance : White Solid Beads
- Specific Gravity : 1.04 Approximately
- Appearance Gravity : 0.60 Approximately

EPS

Class	Applications
Shape Molding	•Shock absorbing Package
	•Fruit & Vegetable Box
	•Fish Box
	•Float
	•Electronic parts
	•Cup
Block Molding	• Insulation board
	•S/W Panel
	•Lightweight Filler

EPS Products

Type	Flame retardants		General purpose	
Grade	120	160	240	320
Size(mm)	0.96~1.74	0.68~1.30	0.59~1.00	0.35~0.71
Usage	Block molding		Shape molding	

LG EPS Grades & Applications

Property of Product	Grade	Particle Size (Φ: ㎜)	Recommendable Density (g/l)	Recommendable Density (lbs/ft)	Typical Application									
					Insulation Board	Large Part Packing	Medium Part Packing	Small Part Packing	Cup	Fruit Box	Fish Box	Floats	Pad	Civil Eng.
General Purpose	B120	0.96~1.74	15.0~20.0	0.93~1.25										
	B160	0.68~1.30	15.0~20.0	0.93~1.25										
	B240	0.59~1.00	15.0~25.0	0.93~1.55										
	B320	0.35~0.71	17.0~30.0	1.05~1.86										
Self Extinguish	R120	0.96~1.74	13.0~17.0	0.81~1.05										
	R160	0.68~1.30	14.0~20.0	0.87~1.05										
	R240	0.59~1.00	15.0~25.0	0.93~1.55										
	R320	0.35~0.71	17.0~30.0	1.05~1.86										

Physical Properties of Molded Products

Properties	Test method DIN	Unit	Density of the end product(g/l)			
			12	15	20	30
Maximum thermal conductivity	56~612	mW/m.k	41	39	36	34
Maximum permeability to steam	53~429	μg/㎡sec	400	300	200	100
Minimum resistance to pressure (relative Crushing 10%)	53~421	kPa	60	80	120	190
Minimum flexural stress at break	53~423	kPa	140	200	280	400
Maximum temperatures for less than 5% warping	53~424	℃	80	80	85	85