

POLYURETHANE Foam also known as Urethane foam is flexible and resilient, comes in a number of colors and can be divided into two classes of “open-cell” foam: Polyether Foams which are low-cost polyurethanes materials having good cushioning, acoustic and packaging properties. Generally the density of polyether foam is less than 2 pounds per cubic foot; Polyester Foams are the second type of polyurethane foam and the density of polyesters range from 2 to 6 pounds per cubic foot. Polyester foams have good properties for packaging, cushioning, acoustic and gasketing applications. Polyurethane foam is also available in an Anti-Static version which is formulated to eliminate the generation of static charge during shipping and handling of electronic parts. Polyurethane foam can also be formulated to filter particulate from fluids and gasses because of its open cell structure, this type of polyurethane foam is known as reticulated or filter foam.

POLYETHYLENE Foam, commonly known as PE Foam, is a “closed-cell” foam which is extruded into planks and rolls, the planks can be laminated together to form 5” thick material. The extrusion process produces a uniform product with excellent dimensional stability and provides for easier and precise fabrication. PE extruded planks cushion against repeated impacts enabling PE to be engineered with anticipated performance, typically used for packaging because of its excellent shock absorption qualities. PE foam is available in densities from 1 to 9 pound per cubic foot and PE foam planks are flat, non-dusting and non-abrasive in nature.

MPE Polyethylene foam planks are also available in multi-density laminations (MDL) having a high density thin gauge top skin and a high-performance low density base. The top layer enables a “hinge” within an end cap that can fold out from a flat, die-cut cushion design. This design affords superior shock absorption and is available in 0.9 or 2.2 pound densities with a 6 pound per cubic foot density top skin.

Polyethylene foam also exists in the cross-linked form which is a high density closed cell foam characterized by a compact feel and resistance to water that enables the material to be thermoformed or compression molded. Unlike other polyethylene foam, cross-linked foam has the ability to protect class “A” surfaces and is used extensively to package medical products.

EXPANDED POLYSTYRENE Foam (EPS) is a thermoplastic, “closed-cell” foam available in densities from 0.7 to 3.0 pounds per cubic foot. This is a lightweight, rigid foam plastic having low thermal conductivity, high compressive strength and excellent shock absorption properties. This makes EPS well suited for insulation and protective packaging applications where reliable performance and value are critical benchmarks. EPS has excellent hot wire and routing characteristics making this material ideal for custom shapes for packaging and thermal applications.

STYROFOAM is a registered trademark for the Dow Chemical Company. Make no mistake; EPS and STYROFOAM are two completely different products. STYROFOAM is an extruded

polystyrene product used in the building industry primarily for insulation. This product is commonly known as "Blue Board". STYROFOAM is also available in many other shapes and covers a wide range of foam products for the floral, craft and special events industry. STYROFOAM is manufactured in sheets, blocks, spheres, cones and other shapes. MPE can supply both styrene products.

FLOCKED FOAM Flocked foam is a combination of polyester based foam with tiny fibers electrostatically oriented and glued to the foam. The fibers are charged in such a way as to make them stand perpendicular to the glued foam surface. This creates a smooth uniform, velvety look and feel. Flocked foam is commonly used in decorative packaging and display applications.

PRESSURE SENSITIVE ADHESIVE (PSA) Pressure sensitive adhesive tape can be defined as a continuous flexible strip of cloth, paper, metal, plastic or foam coated on one or both sides with a permanently tacky surface at room temperature which will adhere to a variety of surfaces with light pressure (finger pressure) with no phase change (liquid to solid) and usually in roll form. PSA's can be blends of natural or synthetic rubber and resin, acrylic, silicone or other polymer systems, with or without additives.