

### Can be accepted for Recycling

# **Expanded Polystyrene (EPS)**

Also called Styrofoam, PS, Foam....

Expanded Polystyrene products are made by placing specially treated polystyrene bead inside a cavity and heating. The bead expands to fill the cavity making the shape required. Each cell starts as a bead, and bonds to the next cell due to the heat and pressure of expansion

Sample showing identification marking and surface finish of expanded polystyrene





Polystyrene Identification Marking



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EPS is relatively brittle and breaks rather than bends. The broken surface shows the cell structure.

EPS can come in a variety of colours.

We currently accept all colours, but they need to be kept separate.

Sample of EPS showing the surface finish and fractured face.





## Can Not be Accepted for Recycling

### **Expanded Polyethylene (EPE)**

Expanded Polyethylene is much softer and more flexible than polystyrene and feels greasy to touch.



It can be made in two ways.

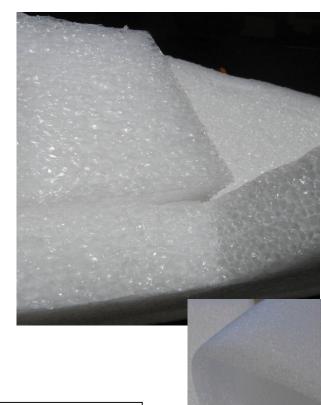
#### 1 - Extruded Polyethylene Sheet

EPE is extruded in a continuous sheet by adding a blowing agent to create a "honeycomb" type structure. The extruded sheet is then used as is or cut into shapes and laminated to make shaped protection for goods.



Samples of extruded sheet which have been cut and joined to make shapes to protect products.

Note polymer codes and id on black sample.





# Can Not be Accepted for Recycling

### 2 - Expanded Polyethylene

This material is made in a similar way to expanded polystyrene.

Special polyethylene bead is placed in a cavity and heated where it expands to take on the shape of the cavity.





## Can Not be Accepted for Recycling

# **Expanded Polypropylene (EPP)**

Expanded polypropylene is made in the same manner as expanded polystyrene. Shapes are made by the expansion of specially treated bead in a cavity.

EPP tends to be much tougher than both EPS and EPE. It will bend and ultimately break, but takes much more force to do this than for EPS.

It has a slightly shiny fracture surface.







Sample of expanded polypropylene, showing the polymer identification code and fractured surface