

ABSTRACT

The present invention provides pre-expanded noncrosslinked polyethylene resin beads which are made of a mixed resin, as a base resin, comprising a high-pressure-process low-density polyethylene, a linear low-density polyethylene, and a linear high-density polyethylene and, when analyzed with a differential scanning calorimeter (DSC), give a fusion endothermic curve which is a mountain-shaped curve having a single peak and in which, when the peak point of the mountain-shaped curve is referred to as A, the point of intersection of the perpendicular line drawn to the temperature axis from A and the base line of the fusion endothermic curve is referred to as B, and the two points at which the straight line drawn through the point C interiorly dividing segment AB in the perpendicular line in a ratio of 9:1 and parallel to the temperature axis intersects the fusion endothermic curve are referred to as D and E, then that temperature width of the mountain-shaped curve part which is the length of segment DE is 15°C or more. The present invention further provides a process for producing the pre-expanded beads. The pre-expanded beads of the present invention are applicable to in-mold molding for producing molded articles of complicated shapes, and the moldings satisfy the desired compression strength even when having a high expansion ratio.