

This Sheet Has Been Replaced



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REPLACED

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IMPROVED INTEGRALLY BLOW MOLDED CONTAINER

HAVING RADIAL BASE REINFORCEMENT STRUCTURE

ABSTRACT

A container made from a synthetic resin, in particular, polyethylene terephthalate. The resin, after having been dried, is first injection molded into a preform like a test tube, and then softened by heating, and finally the required container is made by using the blow drawing technique in combination with a mold designed according to the present invention for integrally blow molding containers having a radial base reinforcement structure. Said base reinforcement structure of the container comprises radially arranged enlarged feet, webs, and ribs, and a hub. In such a design, the hub extends outwardly into a radial configuration, with the enlarged feet supporting the weight of the bottle body, the portions between the feet serving as the webs, the feet and the webs being arranged alternately relative to each other in the shape of a ring; the ribs engaging the front edges of the webs and recessed relative to the enlarged feet and extending smoothly to become the wall of the bottle, and arranged alternately relative to the enlarged feet also in the shape of a ring. In addition to providing good stability for the container to stand upright, the radial base reinforcement structure enhances the capability of withstanding the internal pressure and the impacts of external forces, thus preventing deformation and breakage of the bottle. Therefore, the container of the present invention is particularly suitable for use as bottles for carbonated beverages or as containers where reinforcement of the base structure is required.