

Efficiency of Using Polymer Containers in Packaging Dairy and Meat Products

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Annotation: This article presents information on polymer packaging materials used to preserve milk and meat products in high quality for long-term storage.

Keywords: Polyethylene, cellophane, polypropylene, polymer container, material, cardboard, package.

Introduction

In our republic, supplying the population with high-quality food products through the storage and processing of livestock products, establishing modern processing workshops and factories in regions, strengthening the assortment, quantity, and position of canned products in the global market, developing storage and packaging technologies, and implementing projects with real long-term prospects are among the key requirements of today.

In recent years, a number of laws and decrees have been adopted to ensure the production, storage, and timely processing of livestock products. Therefore, it is advisable to properly organize the collection, storage, and processing of agricultural products, construct modern warehouses and processing enterprises, and widely introduce scientific achievements, advanced technologies, and foreign experience into production. At the same time, the modernization of agriculture, technical and technological re-equipment, and accelerated renewal of leading sectors of the economy should be consistently continued as one of our most important priority tasks.

Object of the Research

The object of the research is polymer packaging containers used for milk and meat products.

Results and their analysis. One of the most common technologies for storing and packaging dairy and meat products in the food industry today is packaging in polymer containers.

Polymer Containers

In recent years, the use of polymers for packaging dairy and meat products has demonstrated high efficiency. Bags made of various films are used for packaging milk, meat, fruits and vegetables, frozen and dried fruits and vegetables, as well as ready-made foods. These packages may be produced from a single material such as polyethylene, cellophane, polypropylene, and others.

In addition, tetra packs made of paper, foil, and polyethylene are used for storing dairy products and beverages. Packaging made from multilayer polymer materials is also widely applied. For example, high-barrier polypropylene containers significantly protect products from oxygen and external contaminants, while preserving aroma and freshness for a long time. Moreover, such packaging is distinguished by its reliability, light weight, and attractive appearance.

In some cases, combined materials consisting of several layers are used. Sometimes aluminum foil or cardboard is also applied. Rigid or semi-rigid containers made from these materials are used for juices, sauces, and ready-made thick foods. Canned products in such containers are sterilized. To facilitate transportation and protect against mechanical damage, packages are placed in cardboard boxes.

Rigid polymer containers are produced using heat-resistant films made from polyvinyl chloride (PVC); polystyrene is also used. The production of containers and packaging of canned products is carried out on automated filling and packaging lines. For bottling dairy beverages, combined materials based on dense paper or cardboard are produced. For this purpose, laminated cardboard coated with thermoplastic materials on both sides is commonly used. Filling such containers is performed under aseptic conditions or with the addition of preservatives.

Polymer materials are also used in the canning industry for producing containers intended for placing raw materials and semi-finished products during processing. These containers vary in shape and volume and are manufactured using casting methods.





Polymer Containers Used for Packaging Dairy and Meat Products

Conclusion. At present, the development of new environmentally friendly and innovative packaging solutions, as well as ensuring consumer convenience, makes the use of polymer packaging containers highly important. This approach helps maintain product quality, enhance consumer appeal, and increase sales volume.

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