WELFARE SERVICES

DRY-PACK FOIL POUCHES

Questions and Answers

What type of pouch is provided by Welfare Services?

The pouches are made of multilayer laminated plastic and aluminum. The material is 7 mils thick and provides protection for food against moisture and insects. The pouches hold 4 liters of product.

How are foil pouches used?

Foil pouches, like metal cans, are used by the food industry for packaging a wide range of both wet and dry pack foods. Wet pack in pouches requires sophisticated pressure systems that are not practical for home processing. Welfare Services uses pouches for dry pack only.

What are the advantages of pouches?

- Do not rust
- Can be cut into smaller packages
- Easily reusable
- Easier to transport than empty cans

What foods can be dry packed in pouches?

Foods, which are shelf-stable and low in moisture and oil content.

How much food does each pouch hold?

Example weights: Wheat 3.2 kilos, Rice 3.1 kilos, and Dry Milk 2.3kilos.

Do foods react with the aluminum in the pouch?

No. Foods do not come in contact with the aluminum in the pouch. The aluminum barrier is important in protecting the food from moisture and oxygen and is separated from the food by an inner layer of food grade polyethylene. Pouches that are clear or translucent do not have the same barrier qualities as this type of pouch.

What is the purpose of using oxygen absorbers in pouches?

Absorbers remove oxygen from the air in the pouch. The low oxygen content is lethal to insects.

What is the best way to seal pouches?

Impulse pouch sealers that meet the following specifications: 5 mm wide seal, 350 mm wide jaws, rated for up to 8 mil (205 microns) thick pouches, and equipped with a safety switch to cancel operation if jaw is obstructed.

- The impulse sealer model used by Welfare Services canneries for both stationary and portable applications is: American International Electric **AIE 305 A1**.
- Do not use clothes irons or other household heating devices to seal these pouches.

Will the sides of the pouch pull in?

Yes, but it may not be noticeable. The amount of "vacuum packed" appearance of the pouch will depend on the type of product and amount of air left in the pouch. Within a few days of packaging, the sides of the pouches will begin to draw in as the oxygen is absorbed. This is more noticeable with granular foods than with powdered products. The residual air in the pouch is mostly nitrogen, which is an inert gas that does not affect food.

How should pouches of food be stored?

Dry pack pouches may be stored on shelves, in cardboard boxes, or in other containers. Exposure to direct sunlight should be avoided. Food storage is best in a cool, dry, rodent free area. Storage containers should be spaced away from direct contact with concrete floors or walls.

Are pouches rodent proof?

No. Pouches are not rodent proof. If rodents are a significant potential problem in the storage area, the pouches could be placed into larger, more rodent resistant containers such as plastic storage containers, plastic buckets, metal drums, or new metal garbage cans.

Can pouches with zip lock seals be used with oxygen absorbers?

No. Zip locks do not provide a seal that is adequate for oxygen absorber packaging.

Can 72 hour kits be packaged in pouches?

No. Many of the items in emergency supplies are not suitable for packaging in either #10 cans or foil pouches. First aid supplies and emergency rations, such as granola bars, are best packaged in containers with removable lids for frequent rotation.

Can pouches be used for water storage?

No. The pouch sealers are not waterproof. They are to be used for dry pack storage only.

Can pouch sealers be used at home?

Yes. Portable pouch sealers are available for check out from home storage centers.

Is it always necessary to package storage foods in pouches?

No. It may be less expensive and more acceptable to store some foods in their original containers. Food items, which are kept in good storage conditions and frequently used, may not need additional packaging.

Technical Notes

- Typical physical construction of the 7 mil (179 microns) thick dry pack pouch is:
  Polyester/aluminum/polyethylene (PET/AL/PE)
- Pouch inside dimensions are: 280 mm x 330 mm.
- The barrier qualities of the pouch are:
  Oxygen Transmission Rate @ 100% oxygen per 100 sq. in./24 hrs. < 0.0005 cc
  Moisture Vapor Transmission Rate @ 100 deg. F. per 100 sq. in./24 hrs. < 0.0006 gms
- Air is approximately 80% nitrogen and 20% oxygen. Absorbers remove only oxygen.