Foil Pouches for Longer-Term Food Storage



What type of pouch is available at home storage centers, at Distribution Services, and online at Idscatalog.com?

The pouches are made of multilayer laminated plastic and aluminum. The material is 7 mils thick (178 microns) and protects food against moisture and insects.

What types of foods can be packaged in pouches?

The pouches can be used to store foods that are dry (about 10% moisture or less), shelf-stable, and low in oil content. Botulism poisoning may result if moist products are stored in oxygen reduced packaging. Visit providentliving.org for specific product recommendations.

How much food does each pouch hold?

Each pouch holds 1 gallon (4 liters) of product. The weight varies by product. A pouch holds 7 pounds (3.2 kg) of wheat, 6.8 pounds (3.1 kg) of white rice, or 5 pounds (2.3 kg) of dry milk.

Do foods react with the aluminum in the pouch?

No. Foods do not come in contact with the aluminum because they are separated from it by a layer of food-grade plastic. The metal barrier is important in protecting the food from moisture and oxygen.

What is the best way to seal pouches?

Pouches should be sealed using an impulse sealer (see related instructions). Do not use an iron or another household heating device because it will not provide an adequate seal, especially for powdered products such as flour or dry milk. The impulse sealers used by Welfare Services (American International Electric AIE 305 A1 and Mercier ME 305 A1) meet the following specifications: 3/16-inch (5 mm) wide seal, 11.5-inch (305 mm) wide jaws, rated for up to 8-mil (205 microns) thick pouches, and equipped with a safety switch to cancel operation if the jaw is obstructed.

Where can I find an impulse sealer?

Impulse sealers are available at most home storage centers. Many stakes also have impulse sealers available. If you prefer, you may purchase an impulse sealer from Distribution Services or online at Idscatalog.com.

Is it necessary to remove all the air from the pouches?

No. Oxygen absorbers remove only the oxygen from the air in the pouches. The low oxygen content eliminates food-borne insects and helps preserve product quality. Visit providentliving.org for additional information on oxygen absorbers.

Is it normal for the sides of the pouch to pull in once the pouch is sealed?

With most products, the sides of sealed pouches will pull in slightly within a few days of packaging. This is more noticeable with granular foods than with powdered products. Visit providentliving.org for additional information on oxygen absorbers.

How should pouches of food be stored?

The pouches store best in a cool, dry, rodent-free area. Storage containers should not be in direct contact with concrete floors or walls.

Are pouches rodent proof?

Pouches are not rodent proof. If rodents or other pests are a significant potential problem in the storage area, the pouches should be placed into containers that are rodent or pest proof. Do not store them in containers that have been used to store nonfood items.

Should emergency kits be packaged in pouches?

Many emergency supply items are not suitable for packaging in foil pouches. First aid items and food rations, such as granola bars, are best stored in containers with removable lids to allow for frequent rotation.

Pouch Sealer Instructions

For Portable Operation of AIE (and ME) 305 A1 Sealers

Please read the entire sheet before starting.

Setting up

- 1. Place the sealer on a sturdy surface about 5 inches (13 cm) above the table top. This will place the sealer jaw opening about 8½ inches (22 cm) above the table for the correct sealing position. Connect the foot switch to the back of the sealer, and place the foot switch on the floor. Plug in the power cord. *Caution: Do not allow children in the area when the sealer is plugged in.*
- 2. Set Recycle dial to 2, Congealing dial to 6, Sealing dial to 4, and Action Selector switch to Manual.
- 3. Open the bag containing oxygen absorbers. Remove the number of packets that you will use in the next 20–30 minutes. Reseal the bag with the impulse sealer. Open and reseal the bag as you need additional groups of absorbers.

Filling pouches

- 1. Fill a pouch with one gallon (4 liters) of product. (Overfilling will result in a poor seal.) A two-quart (2-liter) pitcher, cut off at the two-quart (2-liter) line, is a good measure to use in when you are filling pouches. Fill with two level measures, tapped down.
- 2. Place an oxygen absorber packet on top of the product in each pouch.
- 3. For powdered products, wipe product dust from inside the seal area using a dry towel.

Sealing pouches

- 1. Turn the **Power** switch on. (Do not allow small children in the area when the sealer is on.)
- 2. Place the pouch in an upright position in front of the sealer. Rest its weight on the table or shelf; do not let it hang.
- 3. Close the pouch by grasping the side seams and firmly pulling them outward. Fold the top 1½ inches of the pouch (30–40 mm) over at a right angle, and push down on the pouch to expel extra air from the package. Settle the product, and flatten the pouch opening. If the top will not flatten and fold over easily, check if the pouch is too full.
- 4. Hold the pouch by the side seams, and insert the top edge of the pouch into the jaw opening. Keep fingers clear of the jaw.
- 5. Position the pouch to seal it near the top. Stretch outward on the side seams to remove wrinkles. Press the foot switch to activate the sealer. Release hold on the pouch after the jaw closes. Remove the pouch when the cycle is finished.
- 6. Label the pouch with contents and packaging date.

Testing seals

- 1. Inspect the seams to ensure that they are adequate and without burned spots. The seam should resemble factory seams.
- 2. Check to see if the seam can be pulled apart.
- 3. Push on the pouch to see if air or product can be forced out.
- 4. If seams pull apart, check for inadequate cleaning of seam area or for overfill. If necessary, increase sealing setting by ¼ step (for example, from 4 to 4.25). Verify that the congealing setting is at 6.
- 5. If seams are burned, decrease the sealing setting by 1/4 step.

Notes

- 1. The sealer comes from the factory with two bolts protruding from the front of the machine. These bolts are for holding the shelf provided in the box. Remove the bolts, and do not use the shelf unless it is used as part of a separate stand.
- 2. If the Teflon cover on the lower jaw is burned, unplug the sealer, loosen and lift up the cover, and carefully clean off any burns that may be on the heat strip. Advance the cover approximately $\frac{1}{2}$ inch (12 mm), trim excess, and retighten.
- 3. If the sealer fails to operate, check the two fuses mounted in the lower back of the case. If necessary, replace them with fuses of the correct size.
- 4. Dry foods that are packaged for long-term storage should be limited to those that best retain flavor and nutritional value. These foods should be low in moisture (approximately 10 percent or less), of good quality, and insect free. Avoid exposing dry foods to humid, damp conditions when packaging them. Warning: Products that are too high in moisture should not be stored in reduced oxygen packaging because botulism poisoning may result. Visit providentliving.org for specific product guidelines.

Pouch Sealer Instructions

1



Elevate the sealer five inches (130 mm).

Sealer Settings

- Set Selector to Manual.
- Set Recycle dial to 2.
- Set **Congealing** dial to 6.
- Set Sealing dial to 4.
- Turn the power on.

Caution: Do not allow children in area when the sealer is plugged in.

2



Use a measuring pitcher to fill pouch.

3



Fill pouch with only one gallon (4 liters) of product.

4



Place the oxygen packet in the filled pouch.

5



Wipe off top inside edge of the pouch (for powdered products).

6



Grasp side seams of pouch.

Pull outward on sides to close pouch opening.

Fold the top of the pouch over.

7



Insert top edge of pouch into jaw opening.

Position pouch to seal it near the top.

Stretch outward on side seams to remove wrinkles.

Make certain that fingers are not in jaw opening.

8



Activate the foot switch.

Release hold on pouch after jaw closes.

Remove pouch when cycle is finished.

Inspect pouch to verify that it has sealed properly.

9



Label pouch with contents and packaging date.

PERIODIC SEAL EVALUATION

A



Proper seal. The seal should be similar to the factory seams.

В



If the sealing time is too long, the seal will degloss and may melt.

Decrease **Sealing** dial setting slightly and reseal pouch.

C



DO NOT overfill pouches. A poor seal will result.

D



Seam should not pull apart. Increase **Sealing** dial setting slightly and reseal pouch.

E



Pressing on bag should not cause leaks.