



## Myths & Misconceptions: Mylar Bags & Oxygen Absorbers

There are a few myths and misconceptions about Oxygen Absorbers and Mylar Bags which we have come across and since they were intended to be used commercially for product packaging under the guidance of a food technologist, here are some answers for domestic use.

### True or False?

*Your Mylar bag will look vacuum-packed when the oxygen has been removed.*

This is False. The “vacuum-packed look” is NOT an indication that the oxygen has been removed. This myth is probably why many people seem to think some oxygen absorbers do not work. Just because all the air has NOT been removed from the bag does NOT mean that all the oxygen has not been removed. Air is made up of many gases and Oxygen Absorbers do not absorb air; they absorb oxygen, which is 21% of air. That means roughly 1/5 of the air volume will be gone but 4/5 of the air remains no matter how many oxygen absorbers are used.

### True or False?

*You should check your new Mylar Bag for leaks. Some may have small holes at a folded crease.*

This is False. Mylar is one of the toughest flexible materials ever created but it is not a form of metal. Mylar is a transparent plastic with high tensile strength that is biaxially-oriented (a grid-like structure used for remarkable strength). Mylar has a BOPET coated surface which is thin layer of metal, usually aluminium foil. These creases are NOT holes, they are usually

formed from filling the bags or moving it around which can cause tiny breaks in the outer aluminium foil layer. You will be able to see these if you hold the bag to the light. This happens with all Mylar Foil Films, but their barrier properties are not significantly affected. This coat offers a glossy metallic appearance and serves 2 purposes; makes the films stronger and enhances barrier properties of Mylar Bags.

### True or False?

*If Mylar Bags fail the “flashlight” test than they are no good.*

This is False. Mylar is transparent and metal has been added to the Mylar to increase its barrier properties. People in the past have wondered if light is going to damage their food and it is true that all forms of energy have some potential to effect matter.

What is true is that direct sunlight can have a noticeable effect, however, inside a metalised bag in a cool, dark storage place, there is virtually no effect from light. PackFresh gallon and quart Mylar Bags are metalised through a process called vapor deposition where aluminium is sprayed onto the Mylar surface to make it a better oxygen barrier. When you hold these bags to the light, you can still see through them but they still provide an excellent barrier and will keep food preserved for well over 25 years. Mylar Bags are nonporous, impermeable to gas, reflects light, flexible, durable and puncture-resistant, easy to use and affordable.

*What is Mylar?*

Mylar® brand is a registered trademark owned by Dupont Teijin Films for a specific family of plastic sheet products made from the resin Polyethylene Terephthalate (PET). The true generic terms for this material are either polyester film, polyester sheets or plastic sheet. The metalised coating over the PET sheet provides a barrier which is what gives Mylar bags the ability to protect food inside the bag from its surrounding conditions.

### True or False?

*Pouring hot water into Mylar bag breaks down the plastic making it highly toxic.*

This is False for PackFresh USA Mylar Bags. Mylar bags manufactured by PackFresh USA are made of food-grade, non-toxic Mylar. The metal coating on PackFresh Mylar Bags is **NOT** on the inside of the bag, instead the material used inside of the bag is the same material used

in vacuum sealer food bags which are non-toxic and food-safe. The only thing to bear in mind is that the bag can get very hot to touch and caution should be used when adding boiling water to the Mylar Bag. If you are wanting to add boiling water to the bag then you should purchase a gusseted bag like the [Mylar Food Grade 7 Mil Bag](#) or the [64oz \(2 Quart\) Mylar 5 Mil Food Grade Bag](#). The 64oz (2 Quart) 5 Mil Mylar Bag is said to be the ideal bag for reconstituting food on-the-go – it can hold a decent sized meal and you can add boiling water. However, it would be advised to place the bag in a sturdy container to hold it up when adding boiling water.

PackFresh USA manufacture and supply Mylar Bags to many companies who produce dehydrated and freeze dried food for backpackers, campers and hikers, food that is intended to be conveniently rehydrated with boiling water in such bags.

**NOTE:** Please be aware that adding boiling water to some bags is **NOT** recommended as they may not be made of high quality Mylar and, in fact, may be of poor quality plastic. The quality of Mylar Bags vary from manufacturer to manufacturer and it is advised to check with the manufacturer if or not you can add boiling water to your Mylar Bag. As stated here, you can do this with PackFresh Mylar Bags because they are made out of food-grade and non-toxic material.