

The Thick and Thin of Plastic Bags

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Whether you're new to ordering plastic (poly) bags or a seasoned pro, it doesn't hurt to know more about how the plastic bag industry measures the thickness of plastic bags.

In the United States, the *gauge* (that is, the thickness) of a poly bag is measured in *mils*.

What Is a Mil?

A mil is a unit of measurement that is equal to .001". (This is also referred to as "one one-thousandth of an inch.") Think of it this way:

1 mil = .001"

... so therefore ...

1000 mil = 1" (Not that you'd ever order plastic bags this thick!)

Here's a quick conversion table that covers the standard ranges of thicknesses:

| Mil Thickness | Thousandth of an Inch Thickness | Best For ... |
|---------------|---------------------------------|---|
| ½ mil | .0005" | Short-term use for lightweight products. A grocery store bag is ½ mil. A dry cleaning bag is ¾ mil. |
| ¾ mil | .00075" | |
| 1 mil | .001" | Storing, displaying, and shipping everyday items such as food or clothes. A bread bag is 1.5 mils thick. A trade show bag or retail boutique bag is usually 2 mils. |
| 1.5 mils | .0015" | |
| 2 mils | .002" | |
| 3 mils | .003" | Providing scuff protection and tear resistance during shipping, especially for heavy or abrasive items. Industrial pallet covers are 3 mils. |
| 4 mils | .004" | |
| 5 mils | .005" | |

Quick Tip

To convert from thousandth of an inch to mils, move the decimal point three spaces to the right. For example, .002" becomes 2 mils, and .0035 becomes 3.5 mils.

Note: Countries outside the U.S. sometimes express the thickness of plastic bags in microns (mic). One mil is equal to 25.4 microns.

How to Choose a Plastic Bag's Thickness

In the plastic bag industry, it's crucial to specify the right gauge for the bags you're ordering. Before specifying a bag's thickness, think about:

- The item the bag will contain. Consider the size of the item, as well as its weight. For example, a heavy, medium-sized item would require a thicker gauge than a light, large-sized item.
- How much protection the bag should provide for the item. If the item is delicate or easily scratched, use a thicker gauge.
- The length of time the bag will be used. If you want the bag to be reusable, specify a gauge of at least 2 mils (.002").

Quick Fact
Plastic bag manufacturers measure a bag's gauge with a tool called a *micrometer*.

If you've still got questions about specifying the gauge of your plastic bags, ask us! Drop us an email at sales@multipakusa.com or call us toll-free at 1-800-229-9950.

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