

Everything You Need to Know About Can Liners!

Definitions

- **Film Strength:** Refers to the physical strength of the can liner.
 - Dart Drop Test:** Used to determine the resistance of a bag to local failure or puncturing of the film.
 - Elmendorf Tear Test:** Used to measure the resistance to tearing or puncturing.
- **Gauge:** A term used to describe the thickness of a liner. Linear Low Density liners are measured in mils, while High Density liners are generally measured in microns.
- **High Density Polyethylene:** Dense, economical, hydrocarbon-plastic having good moisture barrier and chemical resistance. Performs well under extreme temperature. Offers superior vapor and moisture protection. Not recommended for sharp or jagged objects.
- **Linear Low Density Polyethylene:** Superior stretch properties provide maximum puncture and tear resistance. Stronger than traditional low density material and non-porous. Better clarity than high density material.
- **Micron:** Based on one millionth of a meter, or one thousandth of a millimeter (.000000). Typically used to designate the thickness of High Density liners. High Density liners usually range from 6 to 24 micron in thickness.
- **Mil:** Measurement based on thousandths of an inch (.000). For example, a .55 mil bag would be .55 thousandths of an inch thick. Common Linear Low Density liners range from .35 to 2.0 mil in thickness. (i.e. .001 = 1 Mil)
- **Post-Consumer Polyethylene:** Plastic material recovered from the public and the environment. This material has typically been exposed to a wide variety of contaminants, both from the varied types of products that were carried in the plastic, and also from the many exposures the plastic may have in the environmental settings.
- **Post-Industrial Polyethylene:** Plastic material recovered from industrial sources, typically from machine start-ups, overruns, defective manufacturing processes, and related causes. This material is typically clean as it has been in a controlled environment.
- **Source Reduction:** Source reduction is decreasing the amount of materials or energy used during the manufacturing or distribution of products and packages. Because it stops waste before it starts, source reduction is the top solid waste priority of the U.S. Environmental Protection Agency.
- **Sustainability:** A characteristic of a process or state that can be maintained at a certain level indefinitely.

Useful Formulas

How to Translate Mils into Micron Equivalents

Mil Thickness	Approx. Micron Equivalent
0.23	6
0.27	7
0.31	8
0.35	9
0.39	10
0.43	11
0.47	12
0.51	13
0.55	14
0.59	15
0.62	16
0.66	17
0.70	18
0.74	19
0.78	20
0.82	21
0.86	22
0.90	23
0.94	24
0.98	25

How to Convert Microns to Mils

To convert microns to mils, divide the micron by 25.4 to arrive at true mil thickness.

$$7 \text{ Microns} \div 25.4 = .28 \text{ Mil} \quad \bullet \quad 34 \text{ Microns} \div 25.4 = 1.34 \text{ Mil}$$

How to Convert Mils to Microns

To convert mil to microns, multiply the mil by 25.4 to arrive at micron thickness.

$$1 \text{ Mil} = 25.4 \text{ Microns} \quad \bullet \quad .31 \text{ Mil} \times 25.4 = 7.9 \text{ Microns}$$

How to Figure Net Case Weights

using the NIST 130 standard.

Linear Low

$$\text{Width} \times \text{Length} \times \text{Mils} \div 15 \times \text{case count} \div 1000$$

High Density

$$\text{Width} \times \text{Length} \times \text{Mic} \times .0027034 \times \text{case count} \div 1000$$

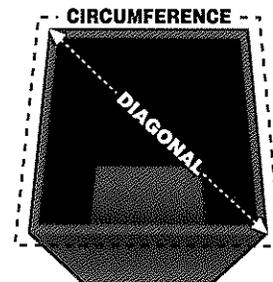
Measuring for Correct Can Liner Size

BAG WIDTH:

Use 1/2 of the outer circumference of the container.

BAG LENGTH:

Use the height of the container, plus 1/2 of the diameter of the container bottom, plus 3 inches (for overhang). For square or rectangular containers, use the diagonal of the container bottom, rather than the diameter.



For complete and updated product information, visit our website:

www.pittplastics.com

or call toll free:

800.835.0366