

## FORMULAS FOR WEIGHT OF POLY BAGS

When sourcing poly bags, it is critical to know the weight per M bags, so you can determine how many total pounds of poly you are sourcing. Very few mills will run less than 500# per size (although there are some specialty small-run companies who specialize in this, at higher cost per pound). Film manufacturers who run 500# to 1000# cost-effectively may not be the best choice for runs of 2000#, 5000# or 10,000. Conversely, long-run hi-speed manufacturers will often not want to run less than 2000# (or certainly not less than 1000#).

The variables in the calculation are: Width, Gusset (if any), Length, Gauge, and Resin Type (constant of 15 or 14.5).

**LDPE or LLDPE – Flat:**  $(W \times L \times GA)/15 = \text{Wt per M bags}$   
Ex: 10x12 .002  $(10 \times 12 \times 2)/15 = 240/15 = 16\# \text{ per M bags}$

**LDPE or LLDPE – Gusseted:**  $((W+G) \times L \times GA)/15 = \text{Wt per M bags}$   
Ex: 12x3x18 .002  $((12+3) \times 18 \times 2)/15 = 540/15 = 36\# \text{ per M bags}$   
Ex: 8x2x12 .002  $((8+2) \times 12 \times 2)/15 = 240/15 = 16\# \text{ per M bags}$

**HDPE – Flat:**  $(W \times L \times GA)/14.5 = \text{Wt per M bags}$   
Ex: 24x24" 12-micron =  $(24 \times 24 \times 0.472)/14.5 = 271.872/14.5 = 18.75\# \text{ per M bags}$

**HPDE – Gusseted:**  $((W+G) \times L \times GA)/14.5 = \text{Wt per M bags}$   
Ex: 12x3x18 10-micron =  $(15 \times 18 \times 0.402)/14.5 = 108.54/14.5 = 7.49\# \text{ per M bags}$

*To get weight per roll (or per case), you need to know number of bags per roll (or per case), and simply multiply by the pack (as a fraction of 1000).*