

# Plastics Comparison Chart



| Material | Clarity   | MVTR*  | O2**   | CO2**  | Impact Strength | Recycle Code |
|----------|-----------|--------|--------|--------|-----------------|--------------|
| Glass    | Excellent | N/A*** | N/A*** | N/A*** | Poor            | N/A          |
| PET      | Excellent | 2.0    | 75     | 540    | Good            | 1            |
| HDPE     | Poor      | 0.5    | 4,000  | 18,000 | Good            | 2            |
| PVC      | Good      | 3.0    | 150    | 380    | Fair            | 3            |
| PP       | Poor      | 0.5    | 3,500  | 7,000  | Fair            | 5            |
| PS       | Excellent | 10.0   | 6,000  | 18,700 | Poor            | 6            |
| PLA      | Very Good | 18-22  | 38-42  | 201    | Good            | 7            |

PET = Oriented or Stretch Blown Polyethylene Terephthalate, virgin or recycled  
 HDPE = High Density Polyethylene  
 PVC = Polyvinyl Chloride  
 PP = Polypropylene  
 PS = Polystyrene  
 PLA = Polylactide – Compostable Bioresin made from Corn Byproducts

\*MVTR stands for Moisture Vapor Transmission Rate in g-mil/100in. 2/24hr. MVTR is a measure of the passage of gaseous H2O through a barrier. The lower the rate, the longer the package protects its contents from moisture and ensures the moisture content of the product remains the same.

\*\*O2 and CO2 stand for Oxygen Transmission Rate (OTR) and Carbon Dioxide Transmission Rate (COTR) in cm3-mil/m2/24hr. OTR and COTR are measures of the amount of gas that passes through a substance over a given period. The lower the readings, the more resistant the plastic is to letting gasses through.