Low-Density Polyethylene (LDPE)



- This type of plastic has the simplest plastic polymer chemical structure, making it very easy and very cheap to process.
- LDPE is considered as a safer plastic option for food and drink use.
- Unfortunately, this type of plastic is quite difficult to recycle.
- LDPE is prepared from **gaseous ethylene under very high pressures** (up to about 350 megapascals, or 50,000 pounds per square inch) and high temperatures (up to about 350 °C [660 °F]) in the presence of oxide initiators.

Uses

- LDPE is mostly used for bags (grocery, dry cleaning, bread, frozen food bags, newspapers, garbage), plastic wraps; coatings for paper milk cartons and hot & cold beverage cups; some squeezable bottles (honey, mustard), food storage containers, container lids.
- Also used for wire and cable covering.

Methods to recycle/reuse LDPE

 Curbside recycling: Like HDPE plastics, many LDPE plastics are accepted through your local curbside recycling program. Just check with your recycling program office to ensure that this is true. Some, however, will accept things like

- milk cartons and food container lids, but they will not accept LDPE plastic bags so be sure to clarify when talking to them.
- Grocery store drop-off programs: Some supermarkets accept LDPE plastic bags for recycling. Check with your local grocery store to see if they have a program in your area.
- Reuse: In many cases, you can reuse old plastic food containers to store more
 food, use for kids drafts, store office supplies, and so on. If you can't recycle
 these plastics using either method above, look for a way to use it around your
 home so that you don't send them to the landfill.