



Association canadienne de
l'industrie des plastiques

since • depuis 1943

Canadian Plastics
Industry Association

July 24, 2014



What Are Plastics?

Toronto, ON, July 24, 2014 - When you watch television, use a computer, ride in a car, bus, train, or plane, you are using plastics. When you go to the doctor's office or hospital or shop at the grocery store, you again are relying on plastics.

So where do plastics come from ... and what are they?

Plastics are derived from materials found in nature, such as natural gas, oil, coal, minerals and plants. The very first plastics were made by nature – did you know that rubber from a rubber tree is actually a plastic?

Interest in making plastics arose in the 1800s to replace scarce materials such as ivory and tortoise shell. The first synthetic plastics were derived from cellulose, a substance found in plants and trees. Cellulose was heated with chemicals and resulted in a new material that was extremely durable.

The raw materials for today's plastics come from many places (some even use salt!), but most plastics can be made from the hydrocarbons that are readily available in natural gas, oil and coal.

The chemistry of plastics can be complex, but the basics are straight forward. Think back to your high school science lessons about atoms and molecules (groups of atoms). Plastics are simply chains of like molecules linked together. These chains are called polymers (this is why many plastics begin with “poly,” such as polyethylene, polystyrene, and polypropylene). Polymers often are made of carbon and hydrogen and sometimes oxygen, nitrogen, sulfur, chlorine, fluorine, phosphorous, or silicon.

The term “plastics” encompasses all these various polymers.

Although there are many polymers, plastics in general are lightweight with significant degrees of strength. Plastics can be molded, extruded, cast, and blown into seemingly limitless shapes and films or foams or even drawn into fibres for textiles. Many types of coatings, sealants, and glues are actually plastics, too.

Today's intelligent plastics are vital to the modern world. These materials enhance our lifestyles, our economy and the environment. For more information visit www.intelligentplastics.ca

-30-

For More Information:

Darlene Gray, Marketing Communications Specialist
Canadian Plastics Industry Association
t. 905.678.7748 ext. 239