



April 16th 2013

What is degradable plastic?

This [CPIA](#) position has been prepared to address environmental claims in the marketplace regarding degradable plastics. The goal is to bring uniformity and understanding to the use of claims of degradability in order to reduce confusion in the marketplace and to contribute in a meaningful way to environmental sustainability.

Type of Degradation

Breakdown Method

Bio-degradable

Materials capable of undergoing biological anaerobic or aerobic decomposition by the action of micro-organisms such as bacteria, fungi and algae under conditions naturally occurring in the biosphere

Compostable

Materials that undergo degradation by biological processes during composting to yield CO₂, water, inorganic compounds and biomass at a rate consistent with other compostable materials in commercial/industrial composting conditions and leave no visible, distinguishable or toxic residue.

Oxo-degradable

Materials that undergo degradation via a multiple stage process using a chemical additive to initiate the degradation, which may be triggered by Ultra-Violet (UV) sunlight, heat and/or mechanical stress with remnants then going through bio-degradation over time

Photo-degradable

Materials that degrade under the action of ultra violet (UV) light such that the material loses strength and fragments into minute particles.

Water-soluble

Materials that are soluble in water, usually within a specific temperature range and then bio-degrade through the action of micro-organisms