



Composting vs. Bio-Assimilation

COMPOSTING

- Costs approximately 3x more.
- Only works in industrial compost unit.
- Does not work in terrestrial or marine environments.
- Does not work in anaerobic landfill.
- Requires collection of plastic items to impact environment.
- Has no impact on plastic litter problem.
- Derived from food stock.
- Requires large amounts of water, fuel, fertilizer, energy, and labor to create lactic acid prior to polymerization of PLA. Significant negative impact on environment.
- Requires special production equipment to be processed into products.
- No ability to be programmed to coincide with useful life of finished product.
- Composting creates methane.

BIO-ASSIMILATION

- Significantly less cost.
- Works in open environment under virtually any conditions.
- Does not require collection of plastic items.
- Derived from natural organic resources.
- Compounded in plant on virtually any standard equipment. No environmental impact.
- Programmable to work with desired useful life of finished product.
- Works as programmed or earlier if plastic product escapes through improper disposal stream.
- Solution to plastic litter.
- Added at minimal inclusion rates, approximately 1%.
- Proven to cause plastic to degrade in fraction of normal time.
- Proven to achieve 100% biodegradation same as leaf. Leaves no filaments. Becomes biomass, creates water and oxygen.
- Works in terrestrial and marine environments.
- ASTM writing new standard to accommodate technology.