

Consumers face confusing and conflicting information about compostable products. The mixed messaging makes it hard to tell when compostable options are a good choice, or even how to actually get the thing to a compost system. This fact sheet summarizes industry terms, and some certifications you might see on compostable goods.

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GLOSSARY

Biodegradable Material will breakdown into carbon dioxide, water, inorganic compounds, and biomass. The process is driven by bacteria or other living organisms. Some materials are biodegradable in many different environments, but the rate and success of decomposition depend on the specific conditions and access to active biology to break it down.





Compostable Material will biodegrade within the specific conditions of a compost system and produce compost. All compostable materials are also biodegradable. For a product to be labeled compostable in many countries, it must meet certain standards set by organizations like the American Society for Testing and Materials (ASTM). These standards provide tested verification that a material can safely break down in a commercial compost facility.

ASTM D6400 A definition of compostable plastics used mostly in the US. This standard specifies that a plastic product labeled as "compostable" must meet three criteria: Under an aerobically managed municipal or industrial composting program it must 1) break down to carbon dioxide, water, inorganic compounds, and biomass at a rate consistent with paper, 2) decompose so that the plastic is not visually distinguishable, and 3) leave no toxic residue. Similar standards set out by other organizations: [ISO 16929](#), [EN 13432](#)

Industrial Compost Industrial and municipal composting process large volumes of organic waste and produce consistent and sanitized soil ammendments. The difference from home composting, or even small farm composting, is the scale and degree of control over heat, moisture, oxygenation.

COMMON CERTIFICATIONS

A certification is supposed to tell a consumer "at a glance" that products meet certain specifications. Here are a few common certifying marks for bioplastics with the standards they reference.

Organization	Biodegradable Products Institute (BPI)	Composting Manufacturing Alliance (CMA)	TÜV AUSTRIA (formerly Vinçotte)	Australasian Bioplastics Association
Certification Mark				
Standards	ASTM D6400 or D6868	ASTM D6400 EN 13432 ASTM D6868	EN 13432 (European Equivalent of ASTM D6400)	AS 5810
Notes	Industrial/Municipal Only. This certifying body refers directly to the ASTM standards. The language specifies that bioplastics break down to the point of no longer being visible, and are not toxic.	Tests the compostability of bioplastics in field conditions to ensure that it will work as a feedstock in real-world industrial compost facilities. This certification is <u>an addition to passing standards</u> such as ASTM, EN, ISO, etc.	Products compost under same conditions as BPI Compostable products	Product degrades 90% in 12 months under much lower temperatures than industrial compost (around 25°C rather than 58°C)