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Degradable Plastics Update Spring 2006

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There is interest on the part of composters regarding the biodegradation of plastics in compost facilities.

There are specifications regarding biodegradable plastics that the American Society for Testing and Materials Standards (ASTM) < <http://www.astm.org> > has developed. ASTM D 6400 (specification for compostable plastics) and D 6868 (specification for biodegradable plastics used as coating on paper and other compostable substrates) address 3 criteria: 1) physical disintegration; 2) mineralization; and 3) safety. The mineralization criterion measures the evolution of carbon dioxide, confirming the full biodegradation of the material. The safety criterion addresses the ability of the material to support plant growth and the concentration of metals (maximum concentration must be less than half of the USEPA Part 503 standards for sewage biosolids). ASTM specifications, developed through years of research, are recognized as science-based.

Products that meet the specifications can obtain certification through the Biodegradable Products Institute (BPI), a not-for-profit trade association. They maintain a WWW site that includes a list of certified products: <http://www.bpiworld.org>.

Note that "biobased" materials (items that contain some percentage of material derived from plants) are not the same as "biodegradable" materials. Biobased materials may or may not conform to the biodegradable specifications discussed above.