

Starch Coated Plastics

What is this technology?

A method of depositing a biodegradable, water-compatible (hydrophilic) coating on water-resistant (hydrophobic) plastic surfaces.



What problem does it address?

The hydrophobic surfaces of plastic materials can be incompatible for applications such as:

- Printing inks & dyes
- Medical purposes
- Packaging that is sensitive to static-buildup

Who could use this technology?

Producers of plastic products looking for non-toxic, biodegradable hydrophilic surface coatings with attributes such as:

- Improved adsorption of water-based inks and dyes
- Improved biocompatibility
- Reduced static buildup

How is this technology unique?

Starch coatings:

- Can be produced for easy removal / breakdown from the plastic surface
- Can be produced for permanent adhesion to the plastic surface
- Can be used to make the film-coated system stimulus-responsive
- Are less toxic and corrosive, and potentially less expensive than other proposed methods of coating plastics with water-compatible materials

Invention In Search of a Use

This technology needs partners to identify potential applications and commercial opportunity.

Stage of Development

The phenomenon has been demonstrated at the laboratory bench scale.

IP Status

Awarded U.S. Patent 6,709,763
Additional patent pending

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