



## Green Care: Environmental Facts about Dart Foam Products

**Most paper foodservice products are coated with wax, polyethylene plastic, or other non-biodegradable materials and are, therefore, essentially no more degradable than foam.**

Polystyrene foam, like most plastics, does not biodegrade.<sup>1</sup> The lack of biodegradation may be a positive feature of plastics, according to Dr. William L. Rathje, an archaeologist with the University of Arizona's Garbage Project and one of the nation's foremost authorities on solid waste and landfills. "The fact that plastic does not biodegrade, which is often cited as one of its great defects, may actually be one of its great virtues," Dr. Rathje has written.<sup>2</sup> In fact, biodegradation can lead to the release of harmful methane gas or leachate, which can contaminate groundwater.<sup>3</sup>

**The manufacture of polystyrene foam hot beverage cups requires less energy than the manufacture of comparable plastic-coated paperboard hot cups with sleeves, and the manufacturing of polystyrene foam cold beverage cups requires less energy than the manufacture of representative-weight wax-coated paperboard cold cups.**

An average-weight polystyrene hot beverage cup requires less than half as much energy to produce as an average-weight polyethylene (PE) plastic-coated paperboard hot cup with a corrugated cup sleeve.<sup>4</sup>

An average-weight polystyrene cold beverage cup requires just over one-third as much energy to produce as a representative-weight wax-coated paperboard cup.<sup>5</sup>

**Plastic-coated paperboard cups don't insulate as efficiently as foam cups.**

Plastic-coated paper cup users frequently use two cups together for hot beverages to protect their hands. This "double cupping" of an average-weight polyethylene (PE) plastic-coated paperboard cup results in over twice as much energy use and solid waste by volume, over five times as much solid waste by weight, and nearly twice as much greenhouse gas emissions as the use of a single average-weight polystyrene cup.<sup>6</sup>

**The manufacture of Dart polystyrene foam products does not deplete the ozone layer.**

Dart polystyrene foam products are not manufactured with chlorofluorocarbons (CFCs) or any other ozone-depleting chemicals. Moreover, Dart Container Corporation never used CFCs in the manufacture of foam cups. Those foodservice manufacturers of polystyrene foam that employed CFCs in their manufacturing processes ceased using them by 1990.<sup>7</sup>

**Polystyrene foam can be recycled as part of an integrated solid waste management strategy.<sup>8</sup>**

Paper foodservice disposables, on the other hand, are rarely recycled. To assist in improving polystyrene recycling rates, Dart Container Corporation established several polystyrene foam recycling facilities in the US and one in Canada. For information on any polystyrene recycling programs that may be available in your area, please visit the Environment section of our website at <http://www.dart.biz> or call 1-800-288-CARE.

**Polystyrene foam is composed of carbon and hydrogen. When properly incinerated polystyrene foam leaves only carbon dioxide, water, and trace amounts of ash.<sup>9</sup>**

In modern waste-to-energy incinerators, the energy generated by the incineration of polystyrene foam cups and other solid waste can provide heat and light for neighboring communities.<sup>10</sup>

**Polystyrene foam foodservice products do not "clog" landfills.**

Polystyrene foam foodservice products constitute less than 1 percent, by both weight and volume, of our country's municipal solid waste.<sup>11</sup>

**For additional environmental information, visit our website at [www.dart.biz](http://www.dart.biz)**

