

## 2 Environmental Groups Laud PVC, BFR Phaseouts

Written by Mike Buetow

Tuesday, 06 October 2009 08:51 -

---

**NEW YORK** — A pair of nonprofit environmental organizations today announced a new research report on companies that are leading the electronics industry by moving away from chemicals that can lead to health and environmental problems.

In “Greening Consumer Electronics: Moving Away from Bromine and Chlorine,” **ChemSec** and **Clean Production Action**

highlight seven companies that have engineered environmental solutions that negate the need for most -- or in some cases all -- uses of brominated and chlorinated chemicals.

“These seven companies demonstrate that there are less toxic and still cost effective alternatives to substances of high concern that do not compromise performance or reliability,” said CPA project director Alexandra McPherson.

High-volume use of bromine and chlorine in flame retardant and plastic resin applications such as brominated flame retardants (BFRs) and polyvinyl chloride (PVC) have been linked to the formation of toxic dioxin compounds, the organizations said.

The report was produced independently by these two organizations and did not receive funding from any commercial entities. The full report along with other background materials and photos can be found at [cleanproduction.org](http://cleanproduction.org) and [chemsec.org](http://chemsec.org).

The companies claimed to demonstrate industry best practices include:

**Apple** — Apple established an innovative program that restricts the use of nearly all bromine and chlorine compounds across all their product lines. As such, Apple now offers a range of PVC- and BFR-free consumer products including iPhones, iPods and computers.

**Sony Ericsson** — The company’s products are now 99.9% BFR-free and will have no PVC components by the end of 2009.

**Seagate** — The largest disk drive manufacturer in the world is now creating new disk drives that no longer use chlorine- and bromine-based chemistries. This success was largely facilitated by the company’s full material disclosure system.

**DSM Engineering Plastics** — This major plastic material manufacturer is among the first to

## 2 Environmental Groups Laud PVC, BFR Phaseouts

Written by Mike Buetow

Tuesday, 06 October 2009 08:51 -

---

offer a complete portfolio of engineering plastics that are free of bromine and chlorine. They developed and produced a new high temperature polyamide 4T polymer with bromine free grades for connectors and sockets as well as a thermoplastic co-polyester that can be used as a replacement for PVC-based wire and cables.

**Nan Ya and Indium** – Nan Ya and Indium overcame major technical challenges to produce bromine- and chlorine-free components for printed circuit boards that are said to meet the same reliability standards of their halogenated products,

**Silicon Storage Technology** – This semiconductor manufacturer was the first in the industry to supply Apple and others with bromine-free chips.