

Electronic Products Meet Fire Safety Standards without DecaBDE



Clean Production Action, an independent, non-industry funded organization, has been researching the viability and effectiveness of electronic products flame retarded without decabromodiphenyl ether (decaBDE). In 2005, we commissioned the Lowell Center for Sustainable Production to assess the availability of alternatives to decaBDE in electronics and textiles. The Lowell Center's report, *An Investigation of Non-Halogen Substitutes in Electronic Enclosures and Textile Applications*, concluded that alternatives to decaBDE flame retarded plastics are widely available on the market and are used in electronic products today.

One of the most common non-brominated alternatives to decaBDE used in electronic products is a phosphorous-based compound resorcinol bis(diphenylphosphate) (RDP). Electronic manufacturers are meeting the Underwriters Laboratories (UL) recommended standard for television components (UL 94) of V-0 with RDP. According to a Washington State Department of Health

assessment, RDP is not a persistent bio-accumulative toxic chemical (PBT). DecaBDE is on Washington State's PBT list and a phase-out is being recommended by the Departments of Ecology and Health as long as safer alternatives are available.

RDP allows products to meet strict fire safety standards needed to protect consumers. Manufacturers of decaBDE, who also manufacture phosphorous-based alternatives, are promoting the use of RDP as a viable alternative for use in electronic enclosures. Websites of manufacturers who produce decaBDE and the alternative flame retardants contradict the claims of bromine industry lobbyists that decaBDE-free products may put consumers at a higher risk to fires.

- Chemtura (formerly Great Lakes Chemical) advertises the use of RDP for TV housings and other consumer electronic products.¹

Finally, in lobbying against bans on decaBDE in states, bromine industry representatives have suggested that prod-

ucts using phosphate based flame retardants are not as safe as ones that contain decaBDE. Dell, a leader in phasing out all brominated flame retardants in favor of alternatives, has the following response:

“Dell and other companies who have prohibited the use of deca-BDE have turned to alternative flame retardants for plastics in their products and to design strategies that reduce the need to use flame retarded plastics at all to meet the necessary fire standards and to promote consumer protection against fire exposure.”

— *Tod Arbogast,*

Director, Dell Sustainable Business

For alternative flame retardant chemicals to compete on the market, they must meet the same high level fire safety standards that are necessary for reducing consumer liability for products sold in the United States.

¹ See www.e1.greatlakes.com — phosphorous-based flame retardant products