



**INDUSTRY NEWS UPDATE**  
*Keeping You Informed About Industry Issues*

**THE ISSUE: RESTRICTION OF PHTHALATES IN CHILDREN'S PRODUCTS**  
***Consumer Products Safety Improvement Act of 2008 (CPSIA Section 108)***

Plasticizers are materials used in vinyl to soften the final product, increasing its flexibility without sacrificing durability characteristics. Of the many types of plasticizers that exist, phthalate ester plasticizers have been used extensively since the 1950's when the use of vinyl resin escalated in consumer products. The use of these plasticizers has recently been challenged by concerns over the potential long-term health impact of these materials. While comprehensive review of the scientific evidence on phthalate esters has yielded little scientific basis to restrict their use, some continue to question their safety and have successfully lobbied governmental bodies in order to limit their use in the market.

The Consumer Product Safety Improvement Act (CPSIA) effective February 10, 2009, bans the sale of toys or childcare articles intended for children under 12 that contain more than 0.1 percent of specific phthalate plasticizers. Additionally, this law establishes federal standards for lead content reductions over time.

The specific plasticizers impacted in this legislation are below.

Phthalate ester plasticizers permanently banned:

- di-(2-ethylhexyl) phthalate (DEHP)
- dibutyl phthalate (DBP)
- benzyl butyl phthalate (BBP)

Phthalate ester plasticizers temporarily banned:

- di-isononyl phthalate (DINP)
- di-isodecyl phthalate (DIDP)
- di-n-octyl phthalate (DnOP)

After a scientific advisory panel review is completed, the temporary ban could be made permanent or lifted.

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\* For information on lead restrictions, please consult Section 101 of the CPSIA. PolyOne products conform to RoHS requirements for lead and other heavy metals.

## **COMPLYING WITH THE LAW**

The seller of the end article is ultimately responsible for its compliance with the law, which may include both testing and labeling. However, partners throughout the supply chain may have a direct impact on the final product.

The Act limits finished goods to less than 0.1 percent (1,000 parts per million) of six specific phthalates. There are several ways a product may contain this level of phthalate:

- First, the material supplier may use a phthalate plasticizer as a raw material in the recipe for the plastic.
- Second, a processor may use a colorant or other additive that contains a phthalate plasticizer.
- And finally, the material provider, processor, or other fabricator may unintentionally add trace amounts of phthalate through the normal manufacturing process. Feed lines, mixing equipment, molds and other tooling may contain residual amounts of restricted substances if not properly cleaned between runs.

For the strictest adherence to the law, care must be taken at every step of the process as the raw materials are converted into end products. It is important to choose supply chain partners who understand these nuances and have the manufacturing ability and control procedures to ensure compliance.

## **CERTIFICATION**

Beginning February 10, 2009, manufacturers (or importers, if manufactured overseas) who are selling the end product are responsible for ensuring that the products comply with the limits established in the Act. However, the Consumer Products Safety Commission (CPSC) has put a temporary stay on the formal testing and certification of these products, originally scheduled to take effect February 10, 2009. The one year stay - until February 10, 2010 - will give the CPSC time to define and clarify the certification rules, testing procedures, and accrediting bodies.

Suppliers in the supply chain may be asked by manufacturers to certify that their raw materials conform to this law as well. There are no specified guidelines for these types of certificates of compliance. Toy manufacturers will need to determine the level of conformity that they will require from each of their suppliers.

## **HOW POLYONE CAN HELP**

PolyOne has products designed to comply with the Consumer Products Safety Improvement Act. Consistent with the Company's **No Surprises Pledge<sup>SM</sup>**, PolyOne takes rigorous steps to ensure that materials specified to the CPSIA comply with the stringent requirements of the regulation. For products that comply with the Act, PolyOne has quality control steps in place for both raw materials and the manufacturing process to isolate the products from contact with the six phthalates.

In addition, these CPSIA-compliant products are classified as a **PolyOne Sustainable Solution** because of their eco-conscious composition. PolyOne has the expertise to custom formulate and manufacture new products to meet a variety of industry and regulatory specifications, including the CPSIA. If you would like more information regarding current products that comply with the CPSIA or are interested in a customized product to meet your company's requirements, please contact your PolyOne sales representative.

## **ADDITIONAL RESOURCES**

Consumer Products Safety Improvement Act

<http://www.cpsc.gov/about/cpsia/cpsia.html#conformity>

CPSC General Certificate of Conformance

<http://www.cpsc.gov/about/cpsia/faq/elecfaq.pdf>

RoHS Directive limiting lead and other hazardous substances:

<http://www.rohs-news.com/whatsrohs.php> or

<http://www.polyone.com/en-us/docs/Pages/RoHSFAQ.aspx>

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