

DE FACTO FEDERAL BAN ON USE OF RECYCLED-TIRE RUBBER IN ARTIFICIAL TURF USED BY CHILDREN UNDER 12?

Phthalates are esters produced from phthalic acid and various alcohols. They are used as solvents and softeners or plasticizers. Phthalates are not chemically bound, and they can easily leach from the host material. Certain phthalates are suspected of affecting human reproduction (reprotoxic). The EPA limit on certain phthalates, such as DEHP, is 6 parts per billion in drinking water.

Virtually all recycled-tire rubber, used as infill for artificial turf, contains phthalates banned as of Feb. 10, 2009, by the Consumer Products Safety Improvement Act (CPSIA), in concentrations greater than .1%, by weight. Most commonly, dibutyl phthalate (DBP) is found in tire rubber, as well as butylbenzyl phthalate (BBP), diethylhexyl phthalate (DEHP), and diethyl phthalate (DEP).

Note: The chemical recipes of the original source tires vary significantly, therefore, the type and concentration of phthalates in a rubber infill (or sand and rubber infill) requires site-specific testing, in multiple field locations, directed at all likely constituent phthalates to determine compliance of the crumb rubber component with the CPSIA.

The, below, CPSC directive defines “children’s toy” and the parameters of allowable limits per the CPSIA:



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What kind of products does the phthalates prohibition apply to?

Three phthalates, DEHP, **DBP**, and **BBP**, have been **permanently prohibited by Congress in concentration of more than 0.1% in “children’s toys”** or “child care articles.” A “children’s toy” means a product intended for a child 12 years of age or younger for use when playing, and a “child care article” means a product that a child 3 and younger would use for sleeping, feeding, sucking or teething.

Three additional phthalates, DINP, DIDP, and DnOP, have been prohibited pending further study

and review by a group of outside experts and the Commission. This interim prohibition applies to child care articles or toys that can be placed in a child's mouth or brought to the mouth and kept in the mouth so that it can be sucked or chewed that contains a concentration of more than 0.1% of the above phthalates.

Does the phthalate prohibition apply to inaccessible parts?

The prohibition on phthalates applies to all parts of a children's toy or child care article as defined in section 108 of the CPSIA. Section 108 does not make an exception or exemption for accessibility for phthalates as is the case for lead in children's products under section 101.

How do you determine whether a product is a children's toy for purposes of compliance with the phthalate limits?

Section 108 limits the amount of phthalates in children's toys and certain other child care articles. A **children's toy is a consumer product designed or intended by the manufacturer for a child 12 years of age or younger for use by the child when the child plays.** Any determination as to whether a particular product is designed and intended for use by a child 12 years of age or younger, would be made on a case by case basis after consideration of the following factors:

- A statement by the manufacturer about the intended use of the product, including a label on the product if such statement is reasonable.
- Whether the product is represented in its packaging, display, promotion or advertising as appropriate for use by the ages specified.
- Whether the product is commonly recognized by consumers as being intended for use by a child of the ages specified.
- The Age Determination Guidelines issued by the Commission staff in September 2002, and any successor to such guidelines.

A manufacturer must apply these factors their products and then consider whether it is **"for use by the child when the child plays"** to determine whether a product meets the definition of a children's toy. **The use of the product by the child for play is a fundamental aspect of such a determination.** The Commission will be evaluating this using staff from Health Sciences, Human Factors, and Compliance, and hopes to provide additional guidance on this issue. In the interim, the Commission staff plans to use the definition of toy in the ASTM F963-07 toy standard for guidance.

The CPSIA, in effect, sets a requirement for phthalate testing of recycled-tire rubber used as infill in artificial turf, to assure compliance with the 0.1% limit, which became effective Feb. 10, 2009. The Act specifically bans the use of recycled-tire rubber which exceeds the phthalate limit, in synthetic turf which may be available to children 12 years old or younger.