

Product Responsibility Best Practices	<b>SUBJECT</b> Decorated Children's Apparel Testing Requirements		<b>LAST UPDATE</b> July 2019
	<b>APPLIES TO</b> • Suppliers • Distributors	<b>FOCUS ON</b> Testing requirements for decorated children's apparel	
	<b>QUICK LINKS</b> • PPAI Corporate Responsibility: <a href="http://ppai.org/corporate-responsibility">http://ppai.org/corporate-responsibility</a> • UL: <a href="http://ul.com/consumer-retail-services/en/industries/premium-promotional-and-licensed-goods/">ul.com/consumer-retail-services/en/industries/premium-promotional-and-licensed-goods/</a> • Consumer Product Safety Commission: <a href="http://www.cpsc.gov">www.cpsc.gov</a>		<b>Intended for beginner compliance programs</b>

*Italic grey text indicates a hyperlink listed in the Online Resources section of this document.*

The *Consumer Product Safety Improvement Act of 2008 (CPSIA)* requires all children's products to undergo third-party testing for certain requirements.

Assuming the garment itself complies with all regulations, the inks, embroidery thread, and any other decoration applied by industry decorators must also comply. In addition, tracking labels be applied by the decorator so that suspect garments can be tracked back to decoration source, date produced, and production batch.

## Garment Size Matters

- **Adult Sizes.** These are considered general-use items and are not subject to CPSIA children's product testing requirements. (They are still subject to flammability requirements.)
- *Children's (Youth) Sizes. These are subject to CPSIA children's product regulations.*

## Regulations On Decoration Elements

If the garments are sized for children or youth, the following guidance applies for these decoration elements:

- **Ink In Substrate.** If the ink becomes part of the garment (substrate) through any application method, lead in substrate must be 100ppm or less.
- **Ink On Surface.** If the ink can be scraped off the garment, lead in surface coatings must be 90pp or less.
- **Phthalates And Childcare Articles.** If the garment is considered a childcare article (used by a child three years of age and younger for sleeping, feeding, sucking, or teething, such as a bib or sleepwear), all components added by the decorator must also undergo third-party testing for phthalates.

- **Hard Attachments.** Lead in substrate (100ppm) and lead in paint (90ppm) limits apply to decorations such as zippers (both painted and unpainted), buttons, clasps, vinyl, hook-and-loop fasteners, and rhinestones (or similar) decorations.
- **Small Parts Caution.** Attachments such as buttons, snaps, zipper tabs, sequins and "bling" should not detach as they present choking hazards to children. Any article intended for use by children under three years of age that presents a choking, aspiration or ingestion hazard because of small parts is a banned hazardous substance.

## Test Requirements For Common Decorating Methods

When decorating children's or childcare garments, consider the following decoration methods and the tests required for each:

**Appliqué.** Decoration or trimming cut from one fabric piece and stitched to another to add dimension or for design techniques.

- **Testing Requirements:** This decorating method would be exempt from testing as a textile since it is simply one piece of fabric stitched to another.

**Digital Printing.** A four-color process of printing directly from a computer file onto a garment.

- **Testing Requirements:** Lead in surface coatings (may be exempt if only CMYK process printing inks are used); phthalates if childcare article.

**Debossing.** A process in which fabrics are engraved with the use of heat rollers under pressure to produce a concave/sunken design on the fabric surface.

- Testing Requirements: This process makes no chemical change to the garment. Testing would only be required if the garment itself would contain lead or phthalates.

**Embossing.** A process in which fabrics are engraved with the use of heated rollers under pressure to produce a raised design on the fabric surface.

- Testing Requirements: This process makes no chemical change to the garment. Testing would only be required if the garment itself would contain lead or phthalates.

**Embroidery.** Decoration consisting of needlework created using a special machine that is programmed to stitch a design combining texture, pattern and color. (See specialty threads and thread below.)

- Testing Requirements: Most thread is exempted as a textile fabric. Testing may be required for some specialty threads, for example metallic thread.

**Flocked Transfer.** Very short individual colored fibers are adhered to a transfer sheet to create intricate textured designs that are transferred by heat to a garment.

- Testing Requirements: If ink is used, the item would be subject to lead in paint if scrapable. Phthalates would apply if scrapable design and item is childcare article. This process may be exempt from testing if only CMYK process printing inks are used. If no inks are used, then the process would not require additional testing.

**Heat Transfer.** The process of transferring a design from a specially treated paper to a garment.

- Testing Requirements: Lead in substrate typically (subject to lead in paint if scrapable). Phthalates would apply if scrapable design and item is childcare article. This process may be exempt from testing if only CMYK process printing inks are used.

**Laser Appliqué.** A laser beam is used to cut single or multiple fabric layers revealing a fine, detailed design. (See reverse appliqué below.)

- Testing Requirements: This process makes no chemical change to the garment. Testing would only be required if the garment contains lead or phthalates.

**Laser Etching.** A process that uses laser technology to etch or burn a mark on a fabric surface.

- Testing Requirements: Lead in substrate (may be exempt if untreated textile).

**Printed Transfer.** Printed transfers use many of the same inks and techniques of printing to create a design that is transferred from a sheet to a garment using heat.

- Testing Requirements: Lead in substrate typically (subject to lead in paint if scrapable). Phthalates would apply if scrapable design and item is childcare article. This process may be exempt from testing if only CMYK process printing inks are used.

**Reverse Appliqué.** A laser beam is used to cut single or multiple fabric layers revealing a detailed design. (See laser appliqué above).

- Testing Requirements: This process makes no chemical change to the garment. Testing would only be required if the garment itself would contain lead or phthalates.

**Screen Printing.** The process of printing by squeezing ink through screens allowing colors to pass through open areas to create a design. Multi-colored designs are achieved using on screen for each color in the design.

- Testing Requirements: Lead in paint typically. Some screen printing penetrates fabric such that it is not scrapable. If so, lead in substrate testing would be applicable. Phthalates if screen printing is subject to lead in paint requirement and item is childcare article.

**Sequin Embroidery.** A technique in which sequins are embroidered directly onto a garment or cap.

- Testing Requirements: Lead in substrate and lead in paint if sequins are painted. Phthalates if sequins are painted and item is childcare article. Attachments, such as sequins and “bling,” should not detach as they present choking hazards to children. Any article intended for use by children under three years of age that presents a choking, aspiration or ingestion hazard because of small parts is a banned hazardous substance.

**Specialty Threads.** Threads designed for effects such as shine, glitter, iridescence or thickness. The threads often are made from synthetic materials including rayon, mercerized cotton, metallics and textured nylon. (See embroidery and thread)

- **Testing Requirements:** Most thread is exempted as a textile fabric. Testing may be required for some specialty threads, for example, metallic thread.

**Studded Transfer.** Colored metallic and rhinestone studs are arranged on a sheet that is used to transfer the studs to a garment using heat.

- **Testing Requirements:** Lead in substrate, and lead in paint if studs are painted. Phthalates if studs are painted and item is childcare article. Attachments, such as sequins and “bling,” should not detach as they present choking hazards to children. Any article intended for use by children under three years of age that presents a choking, aspiration or ingestion hazard because of small parts is a banned hazardous substance.

**Sublimation.** A type of transfer in which dyes, rather than inks, are used to transfer a design onto a substrate with a combination of heat and pressure. The dyes vaporize and are absorbed by polyester fibers.

- **Testing Requirements:** Lead content, although testing may be waived. See below comment from CPSC website: Certain specialty textile ink systems may use inks that effectively act like dyes. Those inks are absorbed into the fabric and bond with the fabric substrate, effectively acting like a dye. CPSC staff treats such textile ink systems as a “dye-like ink.” In that case, the garment would likely be treated as a dyed textile and not subject to any testing for lead in paint or for total lead content (Each case may vary depending upon the type of ink system used and the individual characteristics of the screen print and substrate).

**Thread.** Fine cord of natural or synthetic twisted fiber used for stitching. Machine embroidery threads come in rayon (high sheen), cotton (duller finish), polyester (strong and colorfast), metallics (synthetic core wrapped with metal foil or thin slivers of metal foil) and acrylic (sheen similar to rayon). (See embroidery and specialty thread above.)

- **Testing Requirements:** Most thread is exempted as a textile fabric. Testing may be required for some specialty threads, for example, metallic thread.

### ***Online Resources:***

**PPAI Secondary Tracking Label For Third-Party Decoration Of Children’s Apparel Best Practice:**

<http://www.ppai.org/media/1818/pr-bp-secondary-tracking-label.pdf>

**PPAI Component Parts Best Practice:** <http://www.ppai.org/media/1798/pr-bp-component-part-testing.pdf>

**PPAI Working With A Testing Lab Best Practice:** <http://www.ppai.org/media/1821/pr-bp-working-with-a-test-lab.pdf>

**PPAI Care Labeling For Apparel Best Practice:** <http://www.ppai.org/media/1795/pr-bp-care-labeling-apparel.pdf>

**PPAI Ink Testing Guidelines Best Practice:** <http://www.ppai.org/media/1808/pr-bp-ink-testing.pdf>

**CPSC Summary of Requirements for Clothing Textiles:** <https://www.cpsc.gov/Business--Manufacturing/Business-Education/Business-Guidance/Clothing>

**CPSC FAQs on Lead Limits and Textile Printing:** [www.cpsc.gov/en/Business--Manufacturing/Business-Education/Lead/Total-Lead-Content/](http://www.cpsc.gov/en/Business--Manufacturing/Business-Education/Lead/Total-Lead-Content/)

**P R O D U C T<sup>TM</sup>**  
**RESPONSIBILITY**  
POWERED BY **PPAI**