Consumer Product Safety Improvement Act of 2008

VHG Labs performs testing for compliance with the Consumer Product Safety Improvement Act (CPSIA) of 2008. The CPSIA establishes new limits for the lead content in any children's product, and more stringent regulations on the lead content of paint. In addition, it bans six (6) different phthalates from any children's toy or child care article. A permanent prohibition is placed on three of the phthalates (DEHP, DBP, and BBP); while an interim prohibition is placed on the other three phthalates (DINP, DIDP, and DnOP)[1].

CPSIA Section 101: Lead Testing in Children's Products

VHG Labs performs lead testing for compliance with CPSIA Section 101. As of August 14, 2009, a children's product may not contain more than 300 ppm of lead in *any* accessible part of the product. Two years later (August 14, 2011), this limit will be reduced to 100 ppm. A "children's product" is defined as "any consumer product designed or intended primarily for children 12 years of age or younger."

Section 101 also imposes a more stringent lead paint ban by modifying 16 CFR 1303.1. As of August 14, 2009, the lead limit in paint has been reduced from 0.06% (600 ppm) to 0.009% (90 ppm). This ban applies to paint and any similar surface-coating for consumer use that contains more than 90 ppm of lead. It also covers toys or other articles intended for use by children that bear "lead-containing paint", as well as furniture for consumer use coated with such paint.

CPSIA Section 108: Phthalate Testing in Children's Toys and Child Care Products

VHG Labs performs phthalate testing for compliance with CPSIA Section 108. As of February 10, 2009, a children's toy or child care article may not contain more than 0.1% (1000 ppm) of DEHP, DBP, BBP, DINP, DIDP, or DnOP[1]. A "children's toy" is defined as "a consumer product designed or intended by the manufacturer for a child 12 years of age of younger for use by the child when the child plays." The term "child care article" means "a consumer product designed or intended by the manufacturer to facilitate sleep or the feeding of children age 3 and younger, or to help such children with sucking or teething."

ASTM F963, EN 71, and ISO 8124: Toy Safety

We perform testing for compliance with ASTM F963 Section 4.3.5, as well as EN 71-3 and ISO 8124-3. For ASTM F963, the paint and other similar surface-coatings of toys must meet certain requirements for lead (Pb) content and other heavy metals (antimony (Sb), arsenic (As), barium (Ba), cadmium (Cd), chromium (Cr), mercury (Hg), and selenium (Se)). The other two regulations, EN 71-3 and ISO 8124, apply to all toy materials. Each of these 8 metals has a concentration limit that may not be exceeded in the soluble material of each of the toy's components. These "Maximum Soluble Migrated Element" limits are clearly specified in the table below.

	ASTM F963, 16 CFR 1303	EN 71-3		ISO 8124-3	
Element	Toy Materials - coatings (mg/kg)	Toy Materials - all (mg/kg)	Modeling Clay (mg/kg)	Toy Materials - all (mg/kg)	Modeling Clay, Finger Paint (mg/kg)
Antimony (Sb)	60 S	60 S	60 S	60 S	60 S
Arsenic (As)	25 S	25 S	25 S	25 S	25 S
Barium (Ba)	1000 S	1000 S	250 S	1000 S	250 S
Cadmium (Cd)	75 S	75 S	50 S	75 S	50 S
Chromium (Cr)	60 S	60 S	25 S	60 S	25 S
Lead (Pb)	90 T	90 S	90 S	90 S	90 S
Mercury (Hg)	60 S	60 S	25 S	60 S	25 S
Selenium (Se)	500 S	500 S	500 S	500 S	500 S

S = soluble migratable concentration
T = total concentration

California's Lead-Containing Jewelry Law

VHG Labs performs testing for California's Lead-Containing Jewelry Law, which limits the amount of lead in jewelry, including children's jewelry and body piercing jewelry. All jewelry offered or sold in California must be made entirely from one or more of the materials specified in the Table of Materials Required for Jewelry. This law applies to anyone who manufactures, ships, sells, or offers jewelry for retail sale, or offers jewelry for promotional purposes, in the state of California. The materials requirements have been in effect since September 1, 2007 for children's jewelry and March 1, 2008 for all other jewelry. In this case, children's jewelry is defined as jewelry made for, marketed for use by, or marketed to children ages six (6) and younger.

Frequently Asked Questions (FAQs)

Q: Are you accredited by the Consumer Product Safety Commission (CPSC)?

A: Yes, VHG Labs is recognized as a CPSC accredited laboratory for third party testing of lead in children's products. We are also an A2LA accredited laboratory to ISO/IEC 17025:2005. To view our CPSC accreditation details, please visit http://cpsc.gov/cgi-bin/labapplist.aspx and select "Analytical Services Division, VHG Labs".

Q: What type of products can you test?
A: VHG Labs is capable of testing almost any material you would find in toys, jewelry, furniture, clothing, or other children's products: wood, metal, rubber, plastics, paints, epoxy, fabrics, etc. If you have something unusual, please ask!

Q: What is your turnaround time for testing?
A: This depends on our customer's requirements and the number of samples being sent, but generally one week (5 business days) is standard for us. We do offer rush services (as little as 24 hours), if necessary. Please contact us to discuss your specific needs.

Q: Where should I send my samples?
A: Samples can be sent to:*

CPT Dept., Analytical Services Div.
VHG Labs
276 Abby Rd.
Manchester, NH 03103

**If more than 10 samples are being sent at once, advance notice is appreciated.*

Q: What type of report or certificate do you issue?
A: We provide an analytical lab report for each product tested. The report includes results for each of the product's components, an overall "pass/fail" result, the methods followed, and the regulation to which it complies. The report will also include the ILAC-A2LA accredited symbol. We do not specifically supply a "Certificate of Compliance" because it is the responsibility of the manufacturer, private labeler, or importer of the product to prepare and issue such a document. However, the lab report provided by VHG Labs will be a useful tool when preparing your Certificates of Compliance. For further information about them, please visit 16 CFR Part 1110.

Q: How do I determine how many components my product consists of?
A: We take care of that for you! VHG has a team that specializes in disassembling your product into its homogeneous subcomponents, to make sure that each piece is properly tested.

Q: How much material do you require for each test?
*A: For lead testing, we need at least 0.1 grams (100 mg) of material for **each** substrate component, and at least 0.05 grams (50 mg) for **each** paint or surface coating (different colors count as separate components). If your product contains small components or paints/coatings, this could mean you need to send sufficient replicates to ensure that we have enough of each material. For phthalate testing, we also need at least 0.1 grams (100mg) of material for each component, but testing is only required for rubber, hard & soft plastic, and epoxy. If you are unsure about how much sample or how many duplicate samples to send, please give us a photo or detailed description of your product and we will estimate for you!*

Q: What determines whether a part is considered "inaccessible" under the CPSIA?

A: In general, the lead limits do not apply to any component of a children's product that is not accessible to a child through normal and reasonably foreseeable use and abuse of the product. Reasonably foreseeable use and abuse include swallowing, mouthing, breaking, or other children's activities, and also the aging of the product. Paint, coatings, or electroplating may not be considered a barrier that would render the underlying substrate inaccessible. For further guidance on the rules and regulations for inaccessible component parts, see 16 CFR Part 1500.

Q: What materials or products are excluded from the lead limits of the CPSIA?

A: The Commission has proposed excluding certain natural materials from the lead limits, based upon preliminary determinations that they do not inherently contain lead at levels above the stated limits. These materials include: precious gemstones, certain semiprecious gemstones, pearls, wood, natural fibers, surgical steel, and precious metals. For specifics regarding these exclusions, please refer to 74 FR 2433.

Q: What is considered a paint or similar surface coating material under the CPSIA?

A: In general, liquid or semi-liquid products that change to a solid film when you apply a thin coating to wood, stone, metal, cloth, plastic, or other similar surface. Printing inks, materials such as pigments for plastic that become part of an article itself, and materials such as ceramic glaze which become bonded to the surface of a product are not considered paints or similar surface coating materials.

Q: What is the acceptable concentration in my product for chemicals listed under Proposition 65?

A: Under Proposition 65, there are no acceptable concentrations established for any listed chemical in any given product. An exposure that causes a significant risk of harm from a listed chemical through the use of a product would trigger the warning requirement, not merely the fact that a listed chemical is present in a product. The concentration of a listed chemical would certainly factor into the level of exposure that would result from an individual using a given product. But concentration alone is not sufficient to determine if warnings are required.

For further info, please email technicalservice@vhglabs.com.

[1] Full phthalate names under CPSIA Sec. 108

1) DEHP: di-(2-ethylhexyl) phthalate
2) DBP: dibutyl phthalate
3) BBP: benzyl butyl phthalate
4) DINP: diisononyl phthalate
5) DIDP: diisodecyl phthalate
6) DnOP: di-n-octyl phthalate