



95TH GENERAL ASSEMBLY

State of Illinois

2007 and 2008

SB1687

Introduced 2/9/2007, by Sen. Don Harmon

SYNOPSIS AS INTRODUCED:

New Act

Creates the Lead in Jewelry Act. Provides that on and after March 1, 2008, a person shall not manufacture, ship, sell, or offer for sale jewelry for retail sale in the State unless the jewelry meets certain standards. Provides that on and after January 1, 2008, a person shall not manufacture, ship, sell, or offer for sale children's jewelry for retail sale in the State unless the children's jewelry meets certain standards. Provides that on and after March 1, 2008, a person shall not manufacture, ship, sell, or offer for sale body piercing jewelry for retail sale in the State unless the body piercing jewelry meets certain standards. Sets out standards for the classification of jewelry under the Act. Sets out penalties for violation of the Act. Sets out testing methods for analyzing jewelry under the Act. Provides that the Department of Commerce and Economic Opportunity may adopt rules that modify the testing protocols specified as it deems necessary to further the purposes of this Act.

LRB095 10705 CMK 30939 b

FISCAL NOTE ACT
MAY APPLY

A BILL FOR

1 AN ACT concerning safety.

2 **Be it enacted by the People of the State of Illinois,**
3 **represented in the General Assembly:**

4 Section 1. Short title. This Act may be cited as the Lead
5 in Jewelry Act.

6 Section 5. Definitions. For the purposes of this Act:

7 "Body piercing jewelry" means any part of jewelry that is
8 manufactured or sold for placement in a new piercing or a
9 mucous membrane, but does not include any part of that jewelry
10 that is not placed within a new piercing or a mucous membrane.

11 "Children" means children aged 6 and younger.

12 "Children's jewelry" means jewelry that is made for,
13 marketed for use by, or marketed to, children. For purposes of
14 this Act, children's jewelry includes, but is not limited to,
15 jewelry that meets any of the following conditions:

16 (1) Represented in its packaging, display, or
17 advertising, as appropriate for use by children.

18 (2) Sold in conjunction with, attached to, or packaged
19 together with other products that are packaged, displayed,
20 or advertised as appropriate for use by children.

21 (3) Sized for children and not intended for use by
22 adults.

23 (4) Sold in any of the following:

1 (A) A vending machine.

2 (B) Retail store, catalogue, or online Web site, in
3 which a person exclusively offers for sale products
4 that are packaged, displayed, or advertised as
5 appropriate for use by children.

6 (C) A discrete portion of a retail store,
7 catalogue, or online Web site, in which a person offers
8 for sale products that are packaged, displayed, or
9 advertised as appropriate for use by children.

10 "Class 1 material" means any of the following materials:

11 (1) Stainless or surgical steel.

12 (2) Karat gold.

13 (3) Sterling silver.

14 (4) Platinum, palladium, iridium, ruthenium, rhodium,
15 or osmium.

16 (5) Natural or cultured pearls.

17 (6) Glass, ceramic, or crystal decorative components,
18 including cat's eye, cubic zirconia, including cubic
19 zirconium or CZ, rhinestones, and cloisonne.

20 (7) Elastic, fabric, ribbon, rope, or string, unless it
21 contains intentionally added lead and is listed as a class
22 2 material.

23 (8) All natural decorative material, including amber,
24 bone, coral, feathers, fur, horn, leather, shell, wood,
25 that is in its natural state and is not treated in a way
26 that adds lead.

1 (10) Adhesive.

2 The following gemstones are not class 1 materials:
3 aragonite, bayldonite, boleite, cerussite, crocoite, ekanite,
4 linarite, mimetite, phosgenite, samarskite, vanadinite, and
5 wulfenite.

6 "Class 2 material" means any of the following materials:

7 (1) Electroplated metal that meets the following
8 standards:

9 (A) On and before August 30, 2009, a metal alloy
10 with less than 10% lead by weight that is electroplated
11 with suitable under and finish coats.

12 (B) On and after August 31, 2009, a metal alloy
13 with less than 6% lead by weight that is electroplated
14 with suitable under and finish coats.

15 (2) Unplated metal with less than 1.5% lead that is not
16 otherwise listed as a class 1 material.

17 (3) Plastic or rubber, including acrylic, polystyrene,
18 plastic beads and stones, and polyvinyl chloride (PVC) that
19 meets the following standards:

20 (A) On and before August 30, 2009, less than 0.06%
21 (600 parts per million) lead by weight.

22 (B) On and after August 31, 2009, less than 0.02%
23 (200 parts per million) lead by weight.

24 (4) A dye or surface coating containing less than 0.06%
25 (600 parts per million) lead by weight.

26 "Class 3 material" means any portion of jewelry that meets

1 both of the following criteria:

2 (1) Is not a class 1 or class 2 material.

3 (2) Contains less than 0.06% (600 parts per million)
4 lead by weight.

5 "Component" means any part of jewelry.

6 "EPA reference methods 3050B (Acid Digestion of Sediments,
7 Sludges and Soils) or 3051 (Microwave Assisted Digestion/
8 Sludge, Soils)" means those test methods incorporated by
9 reference in paragraph (11) of subdivision (a) of Section
10 260.11 of Title 40 of the Code of Federal Regulations.

11 "Jewelry" means any of the following:

12 (1) Any of the following ornaments worn by a person:

13 (A) An anklet.

14 (B) Arm cuff.

15 (C) Bracelet.

16 (D) Brooch.

17 (E) Chain.

18 (F) Crown.

19 (G) Cuff link.

20 (H) Decorated hair accessories.

21 (I) Earring.

22 (J) Necklace.

23 (K) Pin.

24 (L) Ring.

25 (M) Body piercing jewelry.

26 (2) Any bead, chain, link, pendant, or other component

1 of an ornament specified in paragraph (1).

2 "Surface coating" means a fluid, semifluid, or other
3 material, with or without a suspension of finely divided
4 coloring matter, that changes to a solid film when a thin layer
5 is applied to a metal, wood, stone, paper, leather, cloth,
6 plastic, or other surface.

7 "Surface coating" does not include a printing ink or a
8 material that actually becomes a part of the substrate,
9 including, but not limited to, pigment in a plastic article, or
10 a material that is actually bonded to the substrate, such as by
11 electroplating or ceramic glazing.

12 Section 10. Jewelry; sale.

13 (a) On and after March 1, 2008, a person shall not
14 manufacture, ship, sell, or offer for sale jewelry for retail
15 sale in the State unless the jewelry is made entirely from a
16 class 1, class 2, or class 3 material, or any combination
17 thereof.

18 (b) Notwithstanding subdivision (a), on and after January
19 1, 2008, a person shall not manufacture, ship, sell, or offer
20 for sale children's jewelry for retail sale in the State unless
21 the children's jewelry is made entirely from one or more of the
22 following materials:

23 (1) A nonmetallic material that is a class 1 material.

24 (2) A nonmetallic material that is a class 2 material.

25 (3) A metallic material that is either a class 1

1 material or contains less than 0.06% (600 parts per
2 million) lead by weight.

3 (4) Glass or crystal decorative components that weigh,
4 in total, no more than one gram, excluding any glass or
5 crystal decorative component that contains less than 0.02%
6 (200 parts per million) lead by weight and has no
7 intentionally added lead.

8 (5) Printing ink or ceramic glaze that contains less
9 than 0.06% (600 parts per million) lead by weight.

10 (6) Class 3 material that contains less than 0.02% (200
11 parts per million) lead by weight.

12 (c) Notwithstanding subdivision (a), on and after March 1,
13 2008, a person shall not manufacture, ship, sell, or offer for
14 sale body piercing jewelry for retail sale in the State unless
15 the body piercing jewelry is made of one or more of the
16 following materials:

17 (1) Surgical implant stainless steel.

18 (2) Surgical implant grade of titanium.

19 (3) Niobium (Nb).

20 (4) Solid 14 karat or higher white or yellow
21 nickel-free gold.

22 (5) Solid platinum.

23 (6) A dense low-porosity plastic, including, but not
24 limited to, Tygon or Polytetrafluoroethylene (PTFE), if
25 the plastic contains no intentionally added lead.

1 Section 15. Penalty.

2 (a) A person who violates this Act shall be liable for a
3 civil penalty not to exceed \$2,500 per day for each violation.
4 That civil penalty may be assessed and recovered in a civil
5 action brought in any court of competent jurisdiction.

6 (b) In assessing the amount of a civil penalty for a
7 violation of this Act, the court shall consider all of the
8 following:

9 (1) The nature and extent of the violation.

10 (2) The number and severity of the violations.

11 (3) The economic effect of the penalty on the violator.

12 (4) Whether the violator took good faith measures to
13 comply with this Act and the time these measures were
14 taken.

15 (5) The willfulness of the violator's misconduct.

16 (6) The deterrent effect that the imposition of the
17 penalty would have on both the violator and the regulated
18 community as a whole.

19 (7) Any other factor that justice may require.

20 Section 20. Testing.

21 (a) The testing methods for determining compliance with
22 this Act shall be conducted using the U.S. Environmental
23 Protection Agency reference methods 3050B or 3051 for the
24 material being tested, except as otherwise provided in Section
25 25, and in accordance with all of the following procedures:

1 (1) When preparing a sample, the laboratory shall make
2 every effort to assure that the sample removed from a
3 jewelry piece is representative of the component to be
4 tested, and is free of contamination from extraneous dirt
5 and material not related to the jewelry component to be
6 tested.

7 (2) All jewelry component samples shall be washed prior
8 to testing using standard laboratory detergent, rinsed
9 with laboratory reagent grade deionized water, and dried in
10 a clean ambient environment.

11 (3) If a component is required to be cut or scraped to
12 obtain a sample, the metal snips, scissors, or other
13 cutting tools used for the cutting or scraping shall be
14 made of stainless steel and washed and rinsed before each
15 use and between samples.

16 (4) A sample shall be digested in a container that is
17 known to be free of lead and with the use of an acid that is
18 not contaminated by lead, including analytical reagent
19 grade digestion acids and reagent grade deionized water.

20 (5) Method blanks, consisting of all reagents used in
21 sample preparation handled, digested, and made to volume in
22 the same exact manner and in the same container type as
23 samples, shall be tested with each group of 20 or fewer
24 samples tested.

25 (6) The results for the method blanks shall be reported
26 with each group of sample results, and shall be below the

1 stated reporting limit for sample results to be considered
2 valid.

3 (b) In addition to the requirements of subsection (a) of
4 this Section, the following procedures shall be used for
5 testing the following materials:

6 (1) For testing a metal plated with suitable undercoats
7 and finish coats, the following protocols shall be
8 observed:

9 (A) Digestion shall be conducted using hot
10 concentrated nitric acid with the option of using
11 hydrochloric acid or hydrogen peroxide.

12 (B) The sample size shall be 0.050 gram to one
13 gram.

14 (C) The digested sample may require dilution prior
15 to analysis.

16 (D) The digestion and analysis shall achieve a
17 reported detection limit no greater than 0.1% for
18 samples.

19 (E) All necessary dilutions shall be made to ensure
20 that measurements are made within the calibrated range
21 of the analytical instrument.

22 (2) For testing unplated metal and metal substrates
23 that are not a class 1 material the following protocols
24 shall be observed:

25 (A) Digestion shall be conducted using hot
26 concentrated nitric acid with the option of using

1 hydrochloric acid and hydrogen peroxide.

2 (B) The sample size shall be 0.050 gram to one
3 gram.

4 (C) The digested sample may require dilution prior
5 to analysis.

6 (D) The digestion and analysis shall achieve a
7 reported detection limit no greater than 0.01% for
8 samples.

9 (E) All necessary dilutions shall be made to ensure
10 that measurements are made within the calibrated range
11 of the analytical instrument.

12 (3) For testing polyvinyl chloride (PVC), the
13 following protocols shall be observed:

14 (A) The digestion shall be conducted using hot
15 concentrated nitric acid with the option of using
16 hydrochloric acid and hydrogen peroxide.

17 (B) The sample size shall be a minimum of 0.05 gram
18 if using microwave digestion or 0.5 gram if using
19 hotplate digestion, and shall be chopped or comminuted
20 prior to digestion.

21 (C) Digested samples may require dilution prior to
22 analysis.

23 (D) Digestion and analysis shall achieve a
24 reported detection limit no greater than 0.001% (10
25 parts per million) for samples.

26 (E) All necessary dilutions shall be made to ensure

1 that measurements are made within the calibrated range
2 of the analytical instrument.

3 (4) For testing plastic or rubber that is not polyvinyl
4 chloride (PVC), including acrylic, polystyrene, plastic
5 beads, or plastic stones, the following protocols shall be
6 observed:

7 (A) The digestion shall be conducted using hot
8 concentrated nitric acid with the option of using
9 hydrochloric acid or hydrogen peroxide.

10 (B) The sample size shall be a minimum of 0.05 gram
11 if using microwave digestion or 0.5 gram if using
12 hotplate digestion, and shall be chopped or comminuted
13 prior to digestion.

14 (C) Plastic beads or stones shall be crushed prior
15 to digestion.

16 (D) Digested samples may require dilution prior to
17 analysis.

18 (E) Digestion and analysis shall achieve a
19 reported detection limit no greater than 0.001% (10
20 parts per million) for samples.

21 (F) All necessary dilutions shall be made to ensure
22 that measurements are made within the calibrated range
23 of the analytical instrument.

24 (5) For testing coatings on glass and plastic pearls,
25 the following protocols shall be observed:

26 (A) The coating of glass or plastic beads shall be

1 scraped onto a surface free of dust, including a clean
2 weighing paper or pan, using a clean stainless steel
3 razor blade or other clean sharp instrument that will
4 not contaminate the sample with lead. The substrate
5 pearl material shall not be included in the scrapings.

6 (B) The razor blade or sharp instrument shall be
7 rinsed with deionized water, wiped to remove
8 particulate matter, rinsed again, and dried between
9 samples.

10 (C) The scrapings shall be weighed and not less
11 than 50 micrograms of scraped coating shall be used for
12 analysis. If less than 50 micrograms of scraped coating
13 is obtained from an individual pearl, multiple pearls
14 from that sample shall be scraped and composed to
15 obtain a sufficient sample amount.

16 (D) The number of pearls used to make the composite
17 shall be noted.

18 (E) The scrapings shall be digested according to
19 EPA reference method 3050B or 3051 or an equivalent
20 procedure for hot acid digestion in preparation for
21 trace lead analysis.

22 (F) The digestate shall be diluted in the minimum
23 volume practical for analysis.

24 (G) The digested sample shall be analyzed
25 according to specification of an approved and
26 validated methodology for inductively coupled plasma

1 mass spectrometry.

2 (H) A reporting limit of 0.001% (10 parts per
3 million) in the coating shall be obtained for the
4 analysis.

5 (I) The sample result shall be reported within the
6 calibrated range of the instrument. If the initial test
7 of the sample is above the highest calibration
8 standard, the sample shall be diluted and reanalyzed
9 within the calibrated range of the instrument.

10 (6) For testing dyes, paints, coatings, varnish,
11 printing inks, ceramic glazes, glass, or crystal, the
12 following testing protocols shall be observed:

13 (A) The digestion shall use hot concentrated
14 nitric acid with the option of using hydrochloric acid
15 or hydrogen peroxide.

16 (B) The sample size shall be not less than 0.050
17 gram, and shall be chopped or comminuted prior to
18 digestion.

19 (C) The digested sample may require dilution prior
20 to analysis.

21 (D) The digestion and analysis shall achieve a
22 reported detection limit no greater than 0.001% (10
23 parts per million) for samples.

24 (E) All necessary dilutions shall be made to ensure
25 that measurements are made within the calibrated range
26 of the analytical instrument.

1 (7) For testing glass and crystal used in children's
2 jewelry, the following testing protocols for determining
3 weight shall be used:

4 (A) A component shall be free of any extraneous
5 material, including adhesive, before it is weighed.

6 (C) The calibration of the scale shall be accurate
7 to within 0.01 gram.

8 Section 25. Authority. The Department of Commerce and
9 Economic Opportunity may adopt rules that modify the testing
10 protocols specified as it deems necessary to further the
11 purposes of this Act.