# **Safer Sofas:** How do Major Furniture Stores Compare?

For nearly 40 years, an antiquated California regulation caused sofas, couches, and chairs across the country to be loaded with pounds of toxic flame retardant chemicals. These chemicals have been associated with serious health risks such as cancer, hyperactivity, and reduced intelligent quotient (IQ) levels. Thanks to the work of NRDC and many others, the state recently updated the regulation to provide better fire safety without the use of flame retardants. Furniture stores can now ask their suppliers for products that do not contain these hazardous, unnecessary chemicals. The new regulation does not prohibit or ban the use of flame retardants, however, so some products may still contain these toxic chemicals.

To help consumers identify where they can purchase safer, healthier furniture without added flame retardants, NRDC surveyed major companies that sell furniture in the United States.



"TOXIC FLAME RETARDANTS ARE FOUND IN EVERYTHING FROM HIGH CHAIRS TO COUCHES AND A GROWING BODY OF EVIDENCE SUGGESTS THAT THESE CHEMICALS HARM HUMAN HEALTH AND THE ENVIRONMENT. WE MUST FIND BETTER WAYS TO MEET FIRE SAFETY STANDARDS BY REDUCING AND ELIMINATING—WHEREVER POSSIBLE— DANGEROUS CHEMICALS."

— California Governor Jerry Brown<sup>1</sup>

### FLAME RETARDANT CHEMICALS AND CALIFORNIA'S TB 117-2013

Since 1975, furniture foam has been laden with flame retardant chemicals to meet the standards of California's Technical Bulletin 117 (TB 117). But recently, studies by the U.S. Consumer Product Safety Commission and other groups have found that flame retardant chemicals in furniture are ineffective at preventing, limiting, or slowing down fires.<sup>2</sup> Further, the chemicals don't stay in the furniture—they migrate out and collect in indoor dust.<sup>3, 4</sup> When people touch, inhale, or accidentally eat contaminated dust, flame retardants enter their bodies.<sup>5</sup> Young children are especially vulnerable to flame retardant exposures.<sup>6, 7</sup> Flame retardant chemicals are associated with a variety of health risks, including cancer,<sup>8</sup> hormone disruption,<sup>9</sup> and diminished cognitive capacity.<sup>10,11,12</sup>

Though TB117 was a California regulation, it became the default standard for furniture sold across the country.<sup>13</sup> A recent study found that most couches tested in the United States contain at least one flame retardant chemical— whether or not they carry a TB117 label.<sup>14</sup>

Since 2011, NRDC has worked with a broad coalition comprised of fire fighters, scientists, doctors, furniture manufacturers, and health advocates to change this outdated standard. Our campaign included meetings with policymakers, petitions, and distributing educational materials. On June 18, 2012, California Governor Jerry Brown directed the state to revise TB117. The revised standard, TB117-2013, improves fire safety by addressing how fires actually start, eliminating the need for flame retardant chemicals. Effective January 1, 2014, companies can voluntarily comply with TB117-2013. The standard will become mandatory on January 1, 2015.<sup>15</sup>

### **NRDC SURVEY OF FURNITURE RETAILERS**

NRDC asked 16 major furniture stores<sup>16</sup> two questions. First, we inquired about plans to offer TB117-2013 compliant furniture without added flame retardant chemicals. Next, we asked how customers would be able to identify which products did or did not contain the chemicals. Of the 16 companies, 11 responded to our request and 9 completed the survey. We supplemented the responses with information from company websites, email and phone follow-ups, and store visits, as appropriate.<sup>17</sup> We based our ratings on stores' responses to the two survey questions and this supplementary information.

The results indicate that some companies are leading the way in offering flame retardant-free products and communicating this information to customers.



# HOW DO THE STORES COMPARE?

The Futon Shop and Crate & Barrel have flame retardant-free furniture available for purchase now. La-Z-Boy, Interline, Williams-Sonoma and IKEA do not currently offer flame retardant-free products but will soon, either later this year or next year. Ethan Allen and Wal-Mart have committed to carrying flame retardant-free products in the future, but are not sure exactly when the products will be available. Pier 1, Restoration Hardware<sup>18,19</sup> and Target<sup>19</sup> indicated that they are evaluating issues associated with the new TB117-2013 standard but did not specify if they planned to carry flame retardant-free products. American Signature, Cost Plus,<sup>19</sup> Macy's,<sup>18,19</sup> Rooms-to-Go, and Sears<sup>19</sup> did not respond to our inquiries.

	Total	Availability of flame retardant-free furniture*		How can customers find information about flame retardant-free products?		Commitment	Responded	
Company		Now	Later date	Clearly stated on website or product label	Ask customer service staff	to Remove Added Flame Retardants	to our request for information	
The Futon Shop <sup>20</sup>	$\checkmark\checkmark\checkmark\checkmark\checkmark$	✓		✓	✓	✓	✓	
Crate & Barrel	$\checkmark\checkmark\checkmark\checkmark$	✓			✓	$\checkmark$	✓	2014
La-Z-Boy	$\checkmark \checkmark \checkmark$		After 9/30/2014		✓	~	✓	4
Williams-Sonoma (Pottery Barn, Pottery Barn Kids, West Elm)	√ √ √ √		1/1/2015	✓	✓	¥	V	
IKEA	$\checkmark \checkmark \checkmark$		1/1/2015		✓	✓	✓	2015
Interline (Scandinavian Designs, Plummers, Dania)	√ √ √		1/1/2015		√	✓	√	5
Ethan Allen	$\checkmark$ $\checkmark$ $\checkmark$				✓	✓	✓	SS
Wal-Mart	$\checkmark \checkmark \checkmark$				✓	✓	✓	NOT SURE
Pier 1	√						✓	
Restoration Hardware <sup>18,19</sup>	√						1	
Target <sup>19</sup>	✓						✓	NO
American Signature								NOT AVAILABLE
Cost Plus <sup>19</sup>								LAB
Macy's <sup>18,19</sup>								Ē
Rooms-to-Go								
Sears <sup>19</sup>								

\* The survey responses apply to TB117-2013 compliant furniture products. TB117-2013 covers upholstered furniture such as couches, sofas, and chairs. TB 117-2013 does NOT apply to mattresses.

NRDC has not independently assessed the practices of the companies cited here and this fact sheet is not meant to be an endorsement of any company. NRDC's goal is to document major furniture retailers' statements about whether they are requesting flame retardant-free products from suppliers and how they are communicating to their customers about flame retardant-free products.

Company responses									
	How can customers find information about flame retardant-free products?								
Company	Customer Service Staff	Point of Purchase Display	Labeling	Online	Other				
The Futon Shop	✓	$\checkmark$		✓					
Crate & Barrel	✓								
La-Z-Boy	V		√*		*All upholstered furniture manufactured after September 30, 2014 will not contain added flame retardants. Customers should check the manufacture date on the product label. Does not clearly state on the label that the product is flame retardant-free.				
Williams-Sonoma (Pottery Barn, Pottery Barn Kids, West Elm): planned for 2015	V	V	V	¥					
IKEA	~				Undecided, but a new foam has been manufactured that will replace all foam containing flame retardants beginning late 2014				
Interline (Scandinavian Designs, Plummers, Dania): planned for 2015	V		√*		*Everything with a stock keeping unit (SKU) beginning with 14 is flame retardant-free. Does not clearly state on the label that the product is flame retardant-free.				
Ethan Allen: planned for later date	✓		√*		*Indicated that labels stating the furniture complies with TB117-2013 will not contain added flame retardants. Does not clearly state on the label that the product is flame retardant-free.				
Wal-Mart: planned for later date					"Will differ on a department-by department basis."				

# HOW TO FIND FLAME RETARDANT-FREE PRODUCTS

STATEMENTS FROM COMPANIES WITHOUT CURRENT PLANS TO OFFER FLAME RETARDANT FREE PRODUCTS

# "PIER 1 IS CURRENTLY EVALUATING THE REQUIREMENTS OF CALIFORNIA TB 117-2013 TO ENSURE WE WILL BE IN COMPLIANCE BY THE DEADLINE." PIER 1

"TARGET REQUESTS THAT FURNITURE FROM OUR SUPPLIERS IS TB117-2013 COMPLIANT BY THE REGULATION DEADLINE; AND WE REQUIRE THAT SUPPLIERS MEET ALL REGULATIONS AND LAWS, INCLUDING FLAME RETARDANT BANS. WE ARE COMMITTED TO EXPANDING OUR SELECTION OF SUSTAINABLE PRODUCT CHOICES THAT EFFECTIVELY BALANCE PRICE, PERFORMANCE AND CONVENIENCE." **TARGET**  "WE ARE STILL IN THE TESTING STAGE AT THIS TIME." **RESTORATION** HARDWARE

#### **CONCLUSION**

As our survey shows, some companies have already taken action to phase out products containing toxic flame retardants, while others lag behind. The encouraging trend of offering more flame retardant-free products is largely the result of policy changes, fueled by successful and persistent efforts from concerned citizens, lawmakers, and organizations, including NRDC. However, we still need to go further. For the safety of their staff and customers, all companies should plan to remove products containing these hazardous, unnecessary chemicals from their stores. First, stores should ask suppliers for products that don't contain flame retardants.

When purchasing furniture, consumers can use the information presented here as a guide, and verify with the store that the product is flame retardant-free.

#### Endnotes

1 Press release from the office of Governor Edmund G. Brown, Jr. Governor Brown directs state agencies to revise flammability standard. Accessed August 15, 2014 from http://gov.ca.gov/news.php?id=17598.

2 Mehta S. Upholstered Furniture Full Scale Chair Tests – Open Flame Ignition Results and Analysis. Bethesda, MD: U.S. Consumer Product Safety Commission; 2012.

3 Zota AR, Rudel RA, Morello-Frosch RA, Brody JG. Elevated house dust and serum concentrations of PBDEs in California: unintended consequences of furniture flammability standards? Environmental science & technology. 2008 Nov;42(21):8158–64.

4 Dodson RE, Perovich LJ, Covaci A, Van den Eede N, Ionas AC, Dirtu AC, et al. After the PBDE Phase-Out: A Broad Suite of Flame Retardants in Repeat House Dust Samples from California. Environmental Science & Technology [Internet]. 2012 Nov; Available from: http://dx.doi.org/10.1021/es303879n.

5 Stapleton HM, Eagle S, Sjödin A, Webster TF. Serum PBDEs in a North Carolina Toddler Cohort: Associations with Handwipes, House Dust, and Socioeconomic Variables. Environmental Health Perspectives [Internet]. 2012 May;120(7). Available from: http://ehp03.niehs.nih.gov/article/fetchArticle.action?articleURI=info:doi/10.1289/ehp.1104802.

6 Butt C, Congleton J, Hoffman K, Fang M, Stapleton HM. Metabolites of Organophosphate Flame Retardants and 2-Ethylhexyl Tetrabromobenzoate (EH-TBB) in Urine from Paired Mothers and Toddlers. Environmental Science & Technology. [Internet]. 2014 Aug 4 [cited 2014 Aug 4]; Available from: http://dx.doi.org/10.1021/es5025299.

7 Lunder S, Hovander L, Athanassiadis I, Bergman A. Significantly higher polybrominated diphenyl ether levels in young U.S. children than in their mothers. Environmental Science & Technology. 2010 Jul;44(13):5256–62.

8 OEHHA. OEHHA Proposition 65 tris(1,3-dichloro-2-propyl) phosphate (TDCPP) [Internet]. 2011. Available from: http://oehha.ca.gov/prop65/ prop65\_list/102811list.html.

9 Chevrier J, Harley KG, Bradman A, Gharbi M, Sjödin A, Eskenazi B. Polybrominated diphenyl ether (PBDE) flame retardants and thyroid hormone during pregnancy. Environmental health perspectives. 2010 Oct;118(10):1444-9.

10 Herbstman JB, Sjödin A, Kurzon M, Lederman SA, Jones RS, Rauh V, et al. Prenatal exposure to PBDEs and neurodevelopment. Environmental health perspectives. 2010 May;118(5):712-9.

To help consumers identify furniture that is flame retardant free, NRDC co-sponsored California legislation. If signed, the bill provides that for furniture made after January 1, 2015, and sold in California, manufacturers must indicate on the furniture's attached label whether or not it contains added flame retardants. These labeled products would then be available in California stores by early 2015.

The use of toxic flame retardant chemicals in furniture is a symptom of the larger problem with our system of chemical regulation. We need to reform the Toxic Substances Control Act so that chemicals are tested for health and safety hazards before they come into the marketplace.

11 Eskenazi B, Chevrier J, Rauch SA, Kogut K, Harley KG, Johnson C, et al. In Utero and Childhood Polybrominated Diphenyl Ether (PBDE) Exposures and Neurodevelopment in the CHAMACOS Study. Environmental health perspectives [Internet]. 2012;(November). Available from: http://ehp.niehs.nih.gov/wp-content/uploads/2012/11/ehp.1205597.pdf.

12 Chen A, Yolton K, Rauch SA, Webster GM, Hornung R, Sjödin A, et al. Prenatal Polybrominated Diphenyl Ether Exposures and Neurodevelopment in U.S. Children through 5 Years of Age: The HOME Study. Environmental Health Perspectives [Internet]. 2014 May 28 [cited 2014 Jul 17]; Available from: http://ehp.niehs.nih.gov/1307562.

13 Stapleton HM, Sharma S, Getzinger G, Ferguson PL, Gabriel M, Webster TF, et al. Novel and High Volume Use Flame Retardants in US Couches Reflective of the 2005 PentaBDE Phase Out. Environmental science & technology [Internet]. 2012 Nov; Available from: http://dx.doi. org/10.1021/es303471d.

14 Stapleton HM, Sharma S, Getzinger G, Ferguson PL, Gabriel M, Webster TF, et al. Novel and High Volume Use Flame Retardants in US Couches Reflective of the 2005 PentaBDE Phase Out. Environmental science & technology [Internet]. 2012 Nov; Available from: http://dx.doi. org/10.1021/es303471d.

15 California Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation. TB 117-2013 Notice of Approval and Order of Adoption. Accessed August 15, 2014 from http://www.bhfti. ca.gov/about/laws/propregs.shtml.

16 NRDC selected 16 furniture retailers to survey, taking into account the following factors: (1) Ranking in Furniture/Today Top 100 stores by furniture sales; (2) Including retailers that offer high-, mid-, and low-priced furniture; and (3) Including retailers with existing policies on flame retardants in products.

17 For retailers who did not respond to the survey or had incomplete survey responses, visits were conducted to store locations in California.

18 In store visits, Macy's and Restoration Hardware staff were knowledgeable about flame retardants, but could offer no clear future policy for their respective stores.

19 Furniture in the store location visited carried the label for the old California standard "TB117."

20 It is unclear whether futons are subject to TB117-2013, but since futons are often used in a similar capacity to couches we included them here.

