

CPSC MEETING LOG UPHOLSTERED FURNITURE

Meeting Between: CPSC staff and barrier fabric manufacturers

Date of Meeting: October 30, 2000

Meeting Site: CPSC Headquarters, East-West Towers, Bethesda, MD


Log Entry By: Dale R. Ray, Project Mgr., EC, (301) 504-0962 x1323

Participants: Peter Mayberry, INDA, Ass'n. of the Nonwoven Fabrics Industry
Chuck Allen, INDA
Herman Forsten, DuPont
Gernot Buerger, Freudenberg
Edward Bennett, Tex Tech
Ron Dombrowski, Tech Tex / Rhodia
Richard Stob, Intek
Harrison Murphy, Ventex
plus about 30 other interested furniture, fiber, foam and
fabric industry representatives
CPSC: Ron Medford, EXHR
Dale Ray, Project Mgr., EC
Plus about 10 other interested CPSC technical and
Commissioners' offices' staff

Summary:

CPSC requested manufacturers of barrier fabrics to meet with the staff to discuss new technological innovations that may be applicable to small open flame ignition resistance of upholstered furniture. Fire blocking barriers have been discussed as one possible means of reducing the risk of fires ignited by small open flame sources such as lighters and matches. Some barriers with intumescent flame retardant characteristics have performed well in CPSC furniture mockup tests.

Mr. Medford opened the meeting with some background on CPSC's regulatory development activities. Mr. Ray briefly described the staff's work as it relates to the potential effectiveness of certain kinds of barriers in either slowing the growth of a fire or extinguishing the fire. Mr. Mayberry introduced the representatives of the INDA member manufacturers participating in the meeting (four of the six presenters are INDA members; Intek and Ventex are not). He recommended that the staff consider a flammability standard that would allow the use of barriers as an alternative to flame retardant cover fabrics. Mr. Allen then gave a brief description of the various methods of manufacture of nonwoven fabrics, including those marketed for use as seating barrier materials. He also showed a short video describing the different products being offered.



Dr. Forsten spoke about DuPont's Kevlar® aramid fiber barrier products. He reported that these barrier materials are widely used to meet California's Technical Bulletin 133 for commercial furniture. The barriers promote char creation when ignited, thereby slowing and eventually extinguishing the fire. They are available for either double upholstery or laminating onto the reverse side of a cover fabric.

Mr. Buerger described Freudenberg's aramid/melamine fiber nonwoven barriers. Melamine is an inherently flame retardant substance used to improve the FR characteristics of the product while reducing the cost. He reported that the 50/50 fiber mix is hydro-entangled to produce a barrier material that is used in the U.K. to meet Crib #5 (large open flame) flammability requirements for commercial furniture. The firm also produces heat-fusible interliners for flame resistant apparel.

Mr. Burnett discussed his firm's products and services; Tex Tech primarily performs needle punching, and also supplies lightweight barriers for aircraft seating use. He noted that a thicker barrier provides more heat resistance, and that needle punching can yield a variety of barrier thicknesses to suit the requirements of the manufacturer.

Mr. Dombrowski discussed intumescent systems in nonwovens, and described Rhodia's work to develop ammonium polyphosphate-coated barrier materials that promote charring when ignited and swell to help extinguish the fire. He noted that barriers could add about 25% to the weight of a cover fabric. He stated that Rhodia's and others' barriers would provide fire protection, but were made to limit the smoke and heat of larger fires, and would not likely pass the CPSC staff's small open flame test.

Mr. Stob described Intek's Firegard® barriers, which are knitted with fiber glass (as opposed to the nonwoven products discussed above). His firm offers barriers with and without "active" or intumescent FR coatings; these may also be laminated to fabrics. These barriers are used to help meet California TB-133, among other specifications. Mr. Stob said that some intumescent barriers could be used with a limited number of fabrics to meet the CPSC staff's draft small open flame test; however, in response to questions, he noted that small flame ignitions may not generate sufficient heat to activate the intumescent chemistry.

Mr. Murphy discussed Ventex's Spungold™ barrier products used in mattresses, and noted that his firm's Aktiv™ intumescent barriers may provide some small open flame resistance in upholstered furniture. He was not optimistic, however, that such barriers would reliably meet the CPSC staff's draft standard. He stated that upholstery fabrics made of FR fibers (rather than FR-treated fabrics) would be most effective.

The industry participants agreed that current flammability regulations, such as those in California and the U.K., did not generate a market for self-extinguishing barrier materials, and that barriers showing potential small flame ignition resistance benefits were generally designed for other applications. Some are developing fire blocking materials more directly geared to a possible small flame ignition standard; however, products responding to this need are not yet on the market.

**CPSC & BARRIER MANUFACTURERS
PUBLIC MEETING 10/30/00
Attendee List**

<u>Name</u>	<u>Affiliation</u>	<u>Phone</u>
Patty Adair	Amer. Textile Mfrs Inst.	202-862-0518
Chuck Allen	INDA	919-233-1210
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Robert Barker	Amer. Fiber Mfrs Ass'n.	727-772-1685
Russ Batson	Amer. Furniture Mfrs Ass'n.	202-466-7362
Carin Bernstiel	Amer. Textile Mfrs Inst.	202-862-0573
Patricia Bittner	CPSC / HS	301-504-0477
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Marilyn Borsari	CPSC / CA	301-504-0400
Gernot Buerger	Freudenberg	978-454-0461
Edward Burnett	Tex Tech Industries	757-728-9414
David DeWulf	Amoco Fabrics & Fibers	770-944-4501
Ron Dombrowski	Rhodia	804-968-6345
Lou Hahn	Elk Corp.	972-872-2293
Alan Handerman	BASF Corp.	828-667-6270
Linda Fansler	CPSC / LS	301-413-0153
Herman Forsten	DuPont Advanced Fibers	804-383-2387
Robert Franklin	CPSC / EC	301-504-0962
Pierre Grondin	Polymer Group, Inc.	704-663-7594
Rik Khanna	CPSC / ES	301-504-0494
Frank Land	Land Fabric Corp.	516-840-2657
Mark Lanning	Hill-Rom Co.	843-740-8586
Peter Mayberry	INDA	703-847-6747
Andy Monfalcone	Precision Fabrics Group	336-510-3214
Dan Moore	Synthetic Industries	828-431-4784
Harrison Murphy	Ventex, Inc.	703-406-4030
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Steven Ogle	Leggett & Platt	615-734-1600
Mark Painley	Precision Fabrics Group	336-510-8011
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Warren Prunella	CPSC / EC	301-504-0962
Dale Ray	CPSC / EC	301-504-0962
Greg Rodgers	CPSC / EC	301-504-0962
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Patsy Semple	CPSC / Ofc. of Comm. Gall	301-504-0530
Tony Shaw	KoSa	703-815-0954
Chuck Smith	CPSC / EC	301-504-0962
Richard Stob	Intek	616-245-0554
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Michael Thomason	BBA Nonwovens	864-967-5926
Michele Wallace	Cotton Incorporated	919-678-2417
Pamela Weller	CPSC / Ofc. of Comm. Moore	301-504-0290
Dennis Wilson	CPSC / Ofc. of Comm. Gall	301-504-0530
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