

National Association of State Fire Marshals



www.firemarshals.org

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March 8, 1999

Donald S. Clark, Secretary  
Office of the Secretary  
Federal Trade Commission  
Sixth St. and Pennsylvania Ave., N.W.  
Washington, DC 20580

Ms. Sadye E. Dunn, Secretary  
Office of the Secretary  
U.S. Consumer Product  
Safety Commission  
Washington, DC 20207

1999 MAR - 8 P  
CPSC/OFFICE OF  
THE SECRETARY

Re: Petition for Rulemaking:  
Fire Hazard Warning Label on  
Certain Upholstered Furniture

Dear Mr. Clark and Ms. Dunn:

The National Association of State Fire Marshals files this joint petition for rulemaking with the Federal Trade Commission ("FTC") and the Consumer Product Safety Commission ("CPSC") pursuant to 16 CFR Part 1 and 16 CFR 1051. Reference hereafter to the "Commission" shall mean the FTC and the CPSC.

The National Association of State Fire Marshals ("NASFM") represents the most senior fire official of each of the 50 states and the District of Columbia. Our members typically have statutory responsibility for code enforcement, fire incidence data, training, fire investigation and other matters pertaining to public safety. As such, our organization carefully monitors commercial, regulatory and other developments that may impact the severity and frequency of fire losses.

CPSA 6 (b)(1) Cleared FP 99-1

3/22/99  
No Mfrs/PrvtLbrs or  
Products Identified  
 Excepted  
Firms Notified,  
Comments Processed.

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## Background

In 1993, the National Association of State Fire Marshals petitioned the CPSC (Petition FP 93-1) to issue a flammability standard for upholstered furniture incorporating the requirements of three standards now in effect in the State of California. Specifically, the petition urged the Commission to issue a flammability standard incorporating the requirements of Technical Bulletins 116, 117 and 133, issued by the Bureau of Home Furnishings and Thermal Insulation of the State of California. (58 FR 42301).

These standards specify tests to measure the (a) resistance of components of upholstered furniture to ignition by small open-flame sources and cigarettes; (b) resistance of finished items of upholstered furniture to ignition by cigarettes; and (c) resistance of finished items of furniture to ignition from large open-flame sources. The California standards also contain labeling requirements.

In support of the petition, NASFM provided information about deaths and injuries from fires involving upholstered furniture in California and in the rest of the United States. The petition asserted that although deaths and injuries from fires involving upholstered furniture in the United States declined appreciably from 1980 through 1989, during the same period the numbers of deaths and injuries from upholstered furniture fires declined at a much faster rate in California.

NASFM provided data showing that the rate of fire deaths associated with upholstered furniture in the United States, excluding California, decreased from 4.97 per million people in 1980 to 3.04 per million in 1989, a decline of 39 percent. By comparison, in 1980 the rate of fire deaths associated with upholstered furniture in California was 1.14 per million people and in 1989 it was 0.41 per million, a decline of 64 percent.

Thus, according to the data, *non-Californians are over 7 times more likely to die in upholstered furniture fires than Californians*. In providing these data, NASFM is not in this petition advocating indirectly the adoption of California's upholstered furniture flammability standards. Here is our point: Particularly if it appears that American consumers outside of California are not as safe as Californians from upholstered furniture fires, shouldn't they at the very least be warned about the known fire hazards posed by these consumer items?

## Nature of the Hazard

A common consumer product application of polyurethane foam is its use in upholstered furniture. Upholstered furniture may be ignited by smoldering cigarettes,

small open flames (candles, matches and cigarette lighters, often as a result of child play), and large open flames when other household items are first ignited. Once ignited, non-fire resistant polyurethane foam (hereafter "polyurethane foam") burns rapidly, emitting large quantities of toxic gases such as carbon monoxide and cyanide. Polyurethane foam's rapid rate of intense heat release typically raises the room temperature to the point of flashover — that is, the point at which all contents of the room are ignited. Clearly, polyurethane foam poses a hazard, in effect making small fires very large, and very deadly, very quickly. The textiles used in upholstered furniture may ignite easily, but provide little fuel and energy to the fire by themselves.

Scope of the Hazard

According to the United States Consumer Product Safety Commission's most recent estimates of fire loss, upholstered furniture and mattresses/bedding account for roughly 10 percent of America's 428,000 residential fires each year. Approximately 4,300 Americans are seriously injured in these fires. Serious burns often require years of hospitalization, multiple surgeries, and physical and emotional therapy.

Most telling, fires started in home furnishings containing polyurethane foam account for 16 percent of all residential fire deaths, making these items one of the most dangerous of all products under the CPSC's jurisdiction.

According to the CPSC, the following losses occurred as a result of 13,100 residential fires in 1996 involving upholstered furniture (1996 *Residential Fire Loss Estimates*):

Upholstered Furniture Fires

	<u>Open flame ignition</u>	<u>Smoldering ignition</u>	<u>Other Ignition</u>	<u>Total</u>
Deaths	90	470	90	650
Injuries	410	940	290	1,640
Property Damage	\$61 million	\$98 million	\$95 million	\$253 million

The Technology Exists to  
Make Furniture Safer From Fire

Upholstered furniture in nursing homes, hospitals, prisons and other institutional settings, as well as the seats of airplanes, automobiles, boats and other modes of transportation are required to meet flammability standards far more stringent than those required for furniture manufactured for the American home. Much of the time, these standards are met with polyurethane foam that is treated to resist ignition. The technology exists to make the foam, and, thus, the upholstered furniture that contains the foam, safer.

Manufacturers Are Aware of the Hazard

According to documents we have obtained (enclosed), foam producers generally provide warning notices with each batch of polyurethane foam provided to upholstered furniture manufacturers. We include one of the many available examples here:

**WARNING**  
**All Polyurethane Foam Can Burn!**

In case of fire, serious personal injury or death can result from extreme heat, rapid oxygen depletion and the production of toxic gases. When ignited, polyurethane foam, like other organic materials, can burn rapidly and generate thick dark smoke and toxic gases leading to confusion, incapacitation, and even death.

Do not expose polyurethane foam to any intense radiant heat or open flames, such as space heaters, open burning operation, cigarettes, welding operations, naked lights, matches, electric sparks or other intense heat sources.

Depending upon the intended use of the polyurethane foam, suitable warnings should be passed on to the ultimate product users. (emphasis added)

*Notably, to our knowledge, these warning labels are not shared by the upholstered furniture manufacturers or their retailer customers with consumers who purchase furniture containing these products. This appears to us a gross failure to discharge the manufacturer/retailer's duty to warn.*

Commission Rule Needed to  
Compel Hazard Disclosure to Consumers

Danger and safety problems with products has compelled the Federal Trade Commission to adopt a disclosure doctrine to require warnings. Failure to warn users of products of dangers that might result from the use of the products has been found to be an unfair practice under section 5 of the Federal Trade Commission Act. For example, the failure of a manufacturer of gasoline engine powered tractors to disclose to customers that the tractors were subject to fuel geysering (forceful ejection of hot fuel through a loosened gas cap) was an unfair practice in violation of Section 5 of the FTC Act. *International Harvester Co.*, 104 FTC 949.

Turning to the CPSC, upholstered furniture is a "product" of "interior furnishing" as those terms are defined in sections 2(e) and 2(h) of the Flammable Fabrics Act, 15 USC 1191(e) and (h). The CPSC has authority under section 4(a) of the Flammable Fabrics Act to issue a "flammability standard or other regulation, including labeling" for a product of interior furnishing if the CPSC determines that such a standard "is needed to adequately protect the public against unreasonable risk of the occurrence of fire leading to death or personal injury, or significant property damage." 15 USC 1193(a). Clearly, the consuming public needs to be informed as to the extent of the fire hazard involved in the use of non-fire resistant polyurethane foam.

Requested Relief

The National Association of State Fire Marshals believes that the withholding of these warnings by manufacturers and retailers of residential upholstered furniture containing polyurethane foam is not in conformity with the FTC Act and the Flammable Fabrics Act. Therefore, NASFM requests:

1. The Federal Trade Commission and/or the Consumer Product Safety Commission to, by rule, require upholstered furniture manufacturers and retailers to affix a label to such furniture sold in the United States containing polyurethane foam in a conspicuous place, bearing precisely the same flammability warnings provided by the polyurethane foam producers; and

2. As an interim step, NASFM requests your agencies to commence a voluntary fire hazard disclosure program with upholstered furniture manufacturers and retailers, whereby such companies would voluntarily agree with the agencies to make

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adequate fire hazard disclosures to U.S. consumers pending the outcome of a decision on this petition for rulemaking.\*

3. Grant such other relief as is equitable and appropriate.

Respectfully submitted,



Rocco J. Gabriele

President

The National Association of State Fire Marshals

Also in support of this petition:

The International Association of Fire Fighters, AFL-CIO-CLC

Encls.

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For the record, in July 1998 NASEM wrote to several major retailers who sell upholstered furniture nationwide. In the letters we suggested that, for the reasons cited in this petition, the upholstered furniture they sell does not contain adequate consumer warnings of the potential fire hazards posed by polyurethane foam contained in the furniture. Unfortunately, to our knowledge, none of these companies has come forward voluntarily and agreed to pass along the warnings being issued by the polyurethane foam producers.



TAKES ON AIR AFTER UNWRAPPED

WARNING

POLYURETHANE FOAM IS FLAMMABLE!

DO NOT EXPOSE POLYURETHANE FOAM TO WELDING, SMOKING MATERIALS, NAKED LIGHTS, OPEN FLAMES, SPACE HEATERS, BURNING OPERATIONS, OR OTHER SUFFICIENTLY INTENSE CAUSES OF HEAT OR FLAMES.

IF IGNITED, POLYURETHANE FOAM CAN BURN RAPIDLY, RELEASING GREAT HEAT AND CONSUMING OXYGEN. IN AN ENCLOSED SPACE, THE RESULTING DEFICIENCY OF OXYGEN CAN PRESENT A DANGER OF SUFFOCATION TO THE OCCUPANTS. SMOKE AND GASES RELEASED BY THE BURNING FOAM CAN BE INCAPACITATING OR FATAL TO HUMAN BEINGS IF INHALED IN SUFFICIENT QUANTITIES.

characteristic of foam to eventually change color.  
er, this in no way affects its comfort or lasting quality.

EXHIBIT  
Dobretz  
1

# WARNING—FLAMMABLE FOAM

## NO FIRES • NO SMOKING • NO SPARK

Improper handling of flexible polyurethane foam during storage and/or installation presents the risk of FIRE and resulting risks from SMOKE AND TOXIC GAS. Once ignited, polyurethane foams will burn rapidly releasing great heat, consuming oxygen at a high rate, and generating thick smoke and toxic gases. The resulting deficiency of oxygen will present a danger of

**SUFFOCATION AND DEATH** to the occupants.

Burning foam can be harmful or fatal to people.

After the fire is out, ensure no toxic gases remain before entering the fire area.





**WARNING****ALL POLYURETHANE FOAM CAN BURN!**

In case of fire, serious personal injury or death can result from extreme heat, rapid oxygen depletion and the production of toxic gases. When ignited, polyurethane foam, like other organic materials, can burn rapidly and generate thick dark smoke and toxic gases leading to confusion, incapacitation or even death.

Do not expose polyurethane foam to any intense radiant heat or open flames, such as space heaters, open burning operation, cigarettes, welding operations, naked lights, matches, electric sparks or other intense heat sources.

Depending upon the intended end use of the polyurethane foam, suitable warnings should be passed on to the ultimate product users.

Warning Label Used By Reeves Foam.



SCO 000343

CARPENTER COMPANY, INC.  
5016 MONUMENT AVENUE  
P. O. BOX 27205  
RICHMOND, VIRGINIA 23261  
804 / 359-0800

OCTOBER 12, 1994



CONTINENTAL SILVERLINE  
710 NORTH DRENNAN  
HOUSTON, TX 77001

RECEIVED

OCT 17 1994

ATTENTION: JOHN ROBBINS

CONTINENTAL

You are probably aware that manufacturers and suppliers have a duty to warn their customers of the potential hazards of their products. In fulfilling our obligation, we affix a warning to packages of our urethane foam products that reads as follows:

W A R N I N G  
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URETHANE FOAM IS FLAMMABLE!

DO NOT EXPOSE URETHANE FOAMS TO OPEN FLAMES OR ANY OTHER DIRECT OR INDIRECT HIGH TEMPERATURE IGNITION SOURCES SUCH AS BURNING OPERATIONS, WELDING, BURNING CIGARETTES, SPACE HEATERS OR NAKED LIGHTS.

ONCE IGNITED, URETHANE FOAMS WILL BURN RAPIDLY, RELEASING GREAT HEAT AND CONSUMING OXYGEN AT A HIGH RATE. IN AN ENCLOSED SPACE THE RESULTING DEFICIENCY OF OXYGEN WILL PRESENT A DANGER OF SUFFOCATION TO THE OCCUPANTS. HAZARDOUS GASES RELEASED BY THE BURNING FOAM CAN BE INCAPACITATING OR FATAL TO HUMAN BEINGS IF INHALED IN SUFFICIENT QUANTITIES.

Please note that the warning applies to urethane foams in general, and it should not be construed that Carpenter Co. foam products are more hazardous than those of any other manufacturers. You should assume that all urethane foams are dangerous once ignited, even if they have been treated with a flame retardant.

We are enclosing a list of publications that gives more information on the flammability and toxicity characteristics of urethane foams and would be happy to discuss this with you should you so desire. We recommend that you take up this matter with

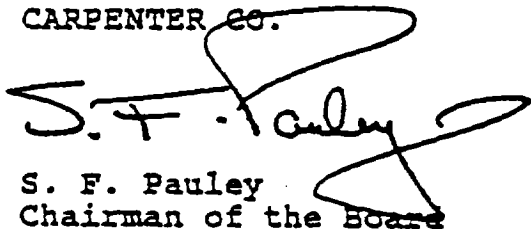
CARPENTER CO.  
5016 MONUMENT AVENUE  
P.O. BOX 27205  
RICHMOND, VIRGINIA 23261  
804 359-0800

your fire insurance underwriters who are in a position to recommend appropriate actions for you to take with regard to your storage and use of urethane foams.

In addition, we also suggest that your lawyer advise you concerning your obligation to warn your customers. We believe that he will recommend that you consider attaching appropriate warnings to your finished products.

Yours truly,

CARPENTER CO.

A handwritten signature in dark ink, appearing to read "S. F. Pauley". The signature is stylized with a large, sweeping flourish that loops back under the name.

S. F. Pauley  
Chairman of the Board

SFP/crs/13

Enclosure

- "Large Scale Fire Tests", W. J. Wilson: Journal of Fire and Flammability, volume 7, page 112, (1976).
- "Fire Safety in the Home: Relative Toxicity of the Pyrolysis Products from Some Materials used in Home Furnishings and the Impact of the California Regulations", California Bureau of Home Furnishings Laboratory Report SP-76-5, (1976).
- "Oxidative Pyrolysis of Aircraft Interior Materials", Spurgeon Speitel, Feher: Journal of Fire & Flammability, volume 8, page 349, (1977).
- "Project RAPRA 3", Wood, Prager, Wilson: International Isocyanate Institute, (1977).
- "Project RAPRA 4, Project Moreton-2", Prager, Wood: International Isocyanate Institute, (1979).
- "Full Scale Burning Behavior of Upholstered Chairs", NBS Technical Note 1103, U. S. Dept. of Commerce, (1979).
- "Precautions for the Proper Usage of Polyurethanes, Polyisocyanurates, and Related Materials: Technical Bulletin 107, Second Edition", Upjohn Chemical Division, (1980).
- "Further Development of a Test Method for the Assessment of the Acute Inhalation Toxicity of Combustion Products", #PB82-217886, Levin: U. S. Dept. of Commerce, (1982).
- "Polymer Degradation During Combustion", #NBS-GCR-82-403, U. S. Dept. of Commerce, (1982).
- "Calculation of the Heat Release Rate by Oxygen Consumption for Various Applications", #NBSIR 81-2427-1, U. S. Dept. of Commerce, (1982).
- "Upholstered Furniture Heat Release Rates Measured with a Furniture Calorimeter", #NBSIR 82-2604, U. S. Dept. of Commerce, (1982).
- "Understanding Polymer Flammability", Dow Chemical, (1983).
- "Dangerous Properties of Industrial Materials, Sixth Edition", N. I. Sax: Reinhold Van Nostrand co, New York, N.Y. (1984).
- "Fire Behavior of Upholstered Furniture", NBS Monograph 173, Babrauskas & Krasny: U. S. Dept. of Commerce, (1985).

## GREAT WESTERN

### FOAM PRODUCTS

Cust. \_\_\_\_\_

Part No. 4250 DIAM

Density \_\_\_\_\_

No. Pcs. \_\_\_\_\_

All Foam Prefixes of V, HR,  
or F. Meets the requirements  
of the Bureau of Home Fur-  
nishing Technical Bulletin  
Number 117

## WARNING

Potential hazards associated with flexible polyurethane foam arise from FIRE and TOXIC THERMAL DECOMPOSITION PRODUCTS and may result from improper disposal and/or mis-application.

Flexible polyurethane foams, in common with other organic materials such as paper, wood, cotton and rubber, can present unreasonable fire hazards when exposed to ignition sources in air. Once ignited, these foams melt to form flammable liquids which may spread flame rapidly and produce intense heat, dense smoke and toxic gases.

- Store buns, sheets and fabricated items indoors under sprinkler protection.
- Do not smoke or use naked lights, open flames, exposed electrical heating elements or other ignition sources near stored flexible foam.
- Be aware that terms like "fire retardant" and "flame resistant" sometimes used to describe flammability properties, do not mean fire safety under all conditions and that small-scale fire tests are NOT INTENDED TO REFLECT HAZARDS PRESENTED BY THESE OR ANY OTHER MATERIAL UNDER ACTUAL FIRE CONDITIONS.

If foam starts burning, follow established fire emergency procedures and exit the area immediately.

# WARNING

## URETHANE FOAM IS FLAMMABLE!

DO NOT EXPOSE URETHANE FOAMS TO OPEN FLAMES OR ANY OTHER DIRECT OR INDIRECT HIGH TEMPERATURE IGNITION SOURCES SUCH AS BURNING OPERATIONS, WELDING, BURNING CIGARETTES, SPACE HEATERS OR NAKED LIGHTS.

ONCE IGNITED, URETHANE FOAMS WILL BURN RAPIDLY, RELEASING GREAT HEAT AND CONSUMING OXYGEN AT A HIGH RATE. IN AN ENCLOSED SPACE THE RESULTING DEFICIENCY OF OXYGEN WILL PRESENT A DANGER OF SUFFOCATION TO THE OCCUPANTS. HAZARDOUS GASES RELEASED BY THE BURNING FOAM CAN BE INCAPACITATING OR FATAL TO HUMAN BEINGS IF INHALED IN SUFFICIENT QUANTITIES.

HOME FURNITURE

HOME FURNITURE

CUSTOMER	SHIP DATE	ERIC NO.	ITEM	LABEL	CUSTOMER P/O	LOAD SEQUENCE
						5
QUANTITY	THICK	WIDTH	LENGTH	COMPRESSION		
1						
PATTERN						
STYLE	DESCRIPTION	PACKAGE TYPE				

UNDER PENALTY OF LAW  
THIS TAG MUST BE REMOVED  
EXCEPT BY THE CONSUMER

ALL NEW MATERIAL CONSISTING OF  
**URETHANE FOAM**

REG. NO. VA. 658

This article is made in compliance with an act of the Dept. of Col. approved July 2, 1928, Kansas app. 10043 March 1922 Minn. approved April 24, 1928, New Jersey revised March 1922 Minn. Statute 26, 10.6 in 16, L. A. 447, 1948, Mass. G. L. Sec. 27B, Chap. 94.

Certification is made by the manufacturer that the materials in this article are described in accordance with law

MADE BY  
**E. R. CARPENTER COMPANY, INC.**  
DATE OF DELIVERY

Dobrefz  
2

Back

**WARNING**

**TO: Shippers, Warehousemen, Handlers, Installers**  
In bulk storage of foam, care should be taken to keep foam away from open flames, sparks, burning cigarettes, heated pipes, electric heaters or any other ignition sources. When ignited, this foam burns rapidly consuming oxygen, generating great heat, thick smoke and toxic gas.

**IF FOAM STARTS BURNING FOLLOW ESTABLISHED FIRE EMERGENCY PROCEDURES AND EXIT THE AREA IMMEDIATELY.**

Do not install cushion in the presence of solvent-based adhesives or use volatile cleaning compounds since they can ignite readily and cause the foam to ignite.



# WARNING

## FLAMMABLE THIS FOAM CAN BURN FAST

WHEN IGNITED, THIS FOAM BURNS RAPIDLY, RESULTING IN GREAT HEAT, GENERATING DANGEROUS AND POTENTIALLY TOXIC GAS AND THICK SMOKE AND CONSUMING OXYGEN. BURNING FOAM CAN BE HARMFUL OR FATAL TO PEOPLE.

Front

**WARNING**

**TO: Consumer**  
Many products used in the home have such as upholstered furniture, bedding and under carpets. According to tests conducted by the Department of Commerce, National Bureau of Standards Reports 78-1051, 78-1436 and 78-1834, when installed horizontally under wall-to-wall which meets COCFE1-70 (PIU Test), creates no greater fire or toxic hazard than any other commonly used underlayment. All Carpet sold in the U.S. is required to meet COCFE1-70.

DO NOT EXPOSE THIS FOAM TO ANY OPEN FLAMES, SPARKS OR OTHER HEAT SOURCES. DO NOT SMOKE NEAR THIS FOAM.

## IF FOAM STARTS BURNING-GET OUT

New Country Club  
9/16

334742

334742

SC0. 000336

### WARNING

#### FLAMMABLE THIS FOAM CAN BURN FAST

WHEN IGNITED, THIS FOAM BURNS RAPIDLY, RESULTING IN GREAT HEAT, GENERATING DANGEROUS AND POTENTIALLY TOXIC GAS AND THICK SMOKE AND CONSUMING OXYGEN. BURNING FOAM CAN BE HARMFUL OR FATAL TO PEOPLE.

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IF FOAM STARTS BURNING-GET OUT

### WARNING

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**IF FOAM STARTS BURNING FOLLOW ESTABLISHED FIRE EMERGENCY PROCEDURES AND EXIT THE AREA IMMEDIATELY.**

Do not install cushion in the presence of solvent-based adhesives or use volatile cleaning compounds since they can ignite readily and cause the foam to ignite.

**TO: Consumer**

Many products used in the home have such as fabrics and urethane cushioning foam in furniture, bedding and under carpets. According to tests conducted by the Department of Commerce, National Bureau of Standards Reports 78-1436 and 78-1834, urethane foam carpet when installed horizontally under wall-to-wall which meets COCFE1-70 (PIU Test), creates no fire or toxic hazard than any other commonly used underlayment. All Carpet sold in the U.S. must pass COCFE1-70.