



# Canadian Requirements for Textile Products

Paul Chowhan
Consumer Product Safety Directorate
Health Canada







# **Textile Requirements in Canada**

- Flammability Hazards
- Chemical Hazards
- Other Considerations



# **FLAMMABILITY HAZARDS**





# Flammability Hazards

Children's sleepwear (in sizes up to and including 14X)

Children's Sleepwear Regulations



Cribs, Cradles and Bassinets Regulations



### **Playpens**

Playpens Regulations

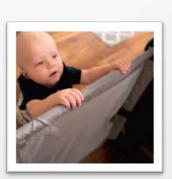


Expansion Gates and Expandable Enclosures
 Regulations



### Dolls, plush toys and soft toys

Toys Regulations



# Flammability Hazards (2)

#### **Tents**

Tents Regulations

### **Carpets and Rugs**

Textile Floor Coverings Regulations

#### **Mattresses**

Mattresses Regulations

### **Bedding + General textile products**

Textile Flammability Regulations









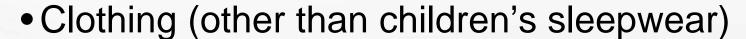


# Textile Flammability Regulations

Apply to consumer products composed of textile

fibres, such as:

- Fabric (yard goods)
- Drapery



Bedding

"Textile fibre" is defined as any natural or manufactured matter that is capable of being made into a yarn or fabric and, without limiting the generality of the foregoing, includes human hair, kapok, feathers and down and animal hair or fur that has been removed from an animal skin. (*Textile Labelling Act*)





### **Test Method**

For General Textile Products, Bedding, Tight-fitting Children's Sleepwear:

Test: Canadian General Standards Board standard CAN/CGSB 4.2 NO. 27.5 entitled Textile Test Methods -Flame Resistance - 45° Angle Test - One Second Flame Impingement, as amended from time to time





# Required Flame Spread Time

For General Textile Products, Bedding, Tight-fitting Children's Sleepwear:

#### **General textile products**

- >3.5 seconds if the product does not have a raised fibre surface
- >4 seconds if the product has a raised fibre surface and exhibits ignition or fusion of its base fibres (i.e. base burn)

#### **Bedding**

 >7 seconds if the product does not have a raised fibre surface OR if the product has a raised fibre surface and exhibits ignition or fusion of its base fibres (i.e. base burn)

#### Tight-fitting children's sleepwear

>7 seconds for products with or without a raised fibre surface AND irrespective of base burn



# Children's Sleepwear Regulations

- Children's Sleepwear: Flammability Requirement Guidelines explain the requirements for sleepwear subject to the Children's Sleepwear Regulations
- Any garment that is likely to be used by children for sleeping or activities related to going to bed is considered to be children's sleepwear, even if it is not labeled as sleepwear.
- **Tight-fitting children's sleepwear:** any children's sleepwear in sizes up to and including 14X other than loose-fitting children's sleepwear
  - <u>including</u> sleepwear designed for infants weighing up to 7 kg, sleepwear designed for hospital use, polo pyjamas and sleepers
- Loose-fitting children's sleepwear: children's nightgowns, nightshirts, dressing gowns, bathrobes, housecoats, robes, pyjamas and baby-doll pyjamas in sizes up to and including 14X,
  - excluding tight-fitting children's sleepwear



# Tight-fitting Children's Sleepwear

- Tight-fitting children's sleepwear that is made of the following fabric is likely to be compliant:
  - cotton, cotton/polyester blends, polyester, acrylic, nylon, silk, rayon, acetate

#### Compliance should always be determined by testing

 Tight-fitting children's sleepwear that does not meet dimensional or design criteria set out in the Children's Sleepwear Flammability Requirement Guidelines must comply with the flammability requirements for loose-fitting children's sleepwear.



### **Test Method**

# Loose-fitting Children's Sleepwear

Test: Flame Resistance Test (Vertical Char Test) in Schedule I of the *Children's Sleepwear* Regulations



# Loose-fitting Children's Sleepwear

 Children's sleepwear that is loose fitting can contact ignition sources such as stove elements, candles, and matches more easily than tight-fitting sleepwear.
 Once ignited, the loose-fitting sleepwear can burn rapidly and cause severe burns to large areas of the child's body, resulting in shock and sometimes death.

#### Required char length:

- Average char length for five specimens must not exceed 178 mm
- Not more than one specimen can have a char length equal to the full length of the specimen (254 mm)
- Fabrics that are likely to be compliant: 100% polyester, 100% nylon, polyester/nylon blends.

Compliance should always be determined by testing



# Loose-Fitting Children's Sleepwear (Cotton Nightgown)

Start ----- 30 Seconds ----> 60 Seconds ----> 90 Seconds ----> 120 Seconds ----> End















# Tight-Fitting Children's Sleepwear (Cotton Polo Pyjamas)

Start Seconds End







## **Compliance Issues**

Recent testing by HC has shown that one-third of samples tested were non-compliant

- Children's sleepwear:
  - Tight-fitting children's sleepwear did not meet the dimensional requirements in the Guidelines
    - Must be tested to more stringent loose-fitting requirements
- Marabou and other feathers:
  - Found on Halloween costumes, boas, women's lingerie and Christmas trees did not meet the flammability requirements



## **Other Products**

#### **Mattresses**

- CAN/CGSB-4.2 No.27.7-2013 (Cigarette test)
  - Melting and charring of fabric + continuing combustion

#### **Tents**

- CPAI-84 (1995)
  - Flammability requirements for flooring materials + wall and top materials
  - Exemptions do not apply
- Labelling

#### **Carpets and Rugs**

- CAN/CGSB-4.2 No. 27.6-2015 (methenamine burning tablet test)
- CAN/CGSB-4.2 No. 30.2-M90 (removal of FR treatments if applicable)
- CAN/CGSB-4.155-M88 (sampling plan; pass/fail criteria)

#### **Dolls, Plush Toys, Soft Toys**

Section 32 and Schedules 5-7 of Toys Regulations



# **CHEMICAL HAZARDS**

### **Chemical Hazards**

- Requirements to address chemical hazards for certain textile products:
  - Consumer Products Containing Lead (Contact with Mouth) Regulations
  - Phthalates Regulations
  - Children's Sleepwear Regulations
  - Expansion Gates and Expandable Enclosures
     Regulations
  - Playpens Regulations
  - Toys Regulations
  - Surface Coating Materials Regulations



# **Chemical Hazards (2)**

- Lead (90 mg/kg total limit):
  - Applied paint on children's textile products (fabric, zippers, snaps, etc.)
  - Any products in contact with the mouth during normal use
- Phthalates (1,000 mg/kg limit for DEHP, DBP, BBP, DINP, DIDP or DNOP):
  - Vinyl in child care articles (for children <4 years of age)</li>
  - Vinyl in toys (for children <14 years of age)</li>







## Flame Retardants (FR)

### Children's Sleepwear

- •FR not necessary to meet the flammability requirements
  - Compliance can be achieved through proper fabric choice and design in accordance with the Children's Sleepwear: Flammability Requirement Guidelines
- Any FR used must not be toxic
- Sleepwear treated with FR must have a permanent label that clearly and legibly displays the presence of FR and care instructions

### **All Apparel**

•TRIS (Tris (2,3 dibromopropyl) phosphate) is prohibited in apparel (item 10 of Schedule 2 to the CCPSA)



# Strangulation and Dragging Hazards



### Drawstrings on children's upper outerwear

- Children's upper outerwear in sizes Newborn to 12 must not have drawstrings in the hood and neck area.
- In accordance with ASTM F1816-97, drawstrings at the waist and bottom of children's upper outerwear in sizes 2T to 16 must:
  - a) not exceed 75 mm in length outside the drawstring channel when the garment is expanded to its fullest width;
  - b) have no toggles, knots, or other attachments at the free ends; and
  - be bartacked (i.e., stitched through the drawstring and channel, usually at the back centre of the channel), if the drawstring is one continuous string.

### **Other Considerations**

- Complaints related to defects in textile
  - products:
  - detached parts (snaps, buttons, zippers, zipper pulls etc.) in children's products
     →choking hazard
  - sharp points from broken parts → laceration hazard
  - untrimmed and unraveled threads → suffocation hazard
  - embedded broken needles and cutting blades → laceration hazard
- Textile Composition Labelling
  - Textile Labelling Act



# **Key Points for Compliance**

- Become knowledgeable about the flammability requirements that apply to your products. Read the applicable regulations and guidelines.
- Ensure your products comply with the flammability requirements before they are exported to Canada by contracting your own testing or requesting test results from your supplier, as required.
- Ensure that testing is done by an accredited textile testing laboratory in accordance with the required test method.
- Although not mandatory, ideally provide Canadian importers with a copy of the test results as proof of compliance with the flammability requirements.





#### **General**

- General prohibition on all consumer products posing a danger to human health or safety
- Labelling requirements in English and French

### Children's sleepwear

- Very stringent flame retardant requirements in Canada (de facto ban), but flame retardant use not required in U.S., standards are performance based.
- Less stringent test requirement applied for all sleepwear in sizes up to 6 months in Canada compared to up to 9 months in U.S.

#### **Tents**

- CPAI-84 mandatory in Canada, but not U.S.
- Compliance with CPAI-84 alone does not mean compliance with Tents Regulations in Canada







### **Carpets and Rugs**

- Canadian requirements apply to indoor and outdoor textile floor coverings, U.S. requirements apply only to products used indoors
- Different number of specimens are to be tested and different pass/fail criteria

#### **Mattresses**

- Canadian cigarette smouldering test is more stringent
- Canada does not use open-flame test
- Mattress pads and crib mattresses are in two different regulations in Canada, whereas in the U.S., they are included in the scope of the applicable U.S. requirements.

### **Bedding**

Canada has requirements for all bedding



### Resources

# Canada Consumer Product Safety Act and Regulations

http://laws-lois.justice.gc.ca/eng/acts/C-1.68/index.html

### **Industry Guides:**

- Flammability of Textile Products in Canada
- Children's Sleepwear: Flammability Requirement Guidelines
- Drawstrings on Children's Upper Outwear

Request a copy at CPS-SPC@hc-sc.gc.ca

### Resources

To subscribe for e-mail updates (ListServ) about the Canada Consumer Product Safety Act

http://hc-sc.gc.ca/cps-spc/legislation/acts-lois/ccpsa-lcspc/\_subscribe-abonnement/index-eng.php

# Textile Labelling Act, Textile Labelling and Advertising Regulations, Guide to the Textile Labelling Act and Regulations

http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/h\_02575.html

### **Chemicals Management Plan**

http://www.chemicalsubstances.gc.ca



# THANK YOU



Consumer Product Safety Program <a href="mailto:cps-spc@hc-sc.gc.ca">cps-spc@hc-sc.gc.ca</a>

http://www.healthycanadians.gc.ca http://www.hc-sc.gc.ca/cps-spc/index-eng.php