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INFLAMMABLE TEXTILE FABRICS.
THE FABRICS (MISDESCRIPTION) REGULATIONS 1959

The Board of Trade yesterday laid before Parliament the Fabrics (Misdescription) Regulations 1959 which prescribe new standards of non-inflammability to which textile fabrics must conform if they are described in any way which implies that they are non-inflammable, or give a measure of safety from fire. The Regulations are made under the Fabrics (Misdescription) Act 1913. The former Regulations made in 1914 are revoked. These were out of date and no longer appropriate to fabrics treated by modern processes.

The new Regulations prescribe two standards: one to which fabrics must conform if they are described in terms which suggest that they are non-inflammable and a lower, but nevertheless stringent, standard to which all textile fabrics for which some degree of the quality of non-inflammability is claimed must conform. Standard washing treatments are prescribed to which fabrics must be submitted before the final burning tests. These treatments are designed to ensure as far as possible that the material will retain its fire resisting properties throughout its useful life, always provided that it is washed in ways suitable for coloured fabrics and is not bleached; bleach tends to destroy the effect of flame resistant processing.

In the case of industrial clothing subjected to the higher test for non-inflammability the washing test is not prescribed for fabrics made up into such clothing which is indelibly marked with instructions to reprocess after each cleaning.

For the purpose of the Regulations the Board of Trade have adopted a standard burning test set out in British Standard 2963 and standards of test and performance set out in the new British Standards for flame proofing clothing (B.S. 1547, 3120 and 3119) and for fabrics of low flammability (B.S. 3121), publication of which was announced yesterday by the British Standards Institution. Fabrics claimed to be non-inflammable without qualification must pass the tests set out in B.S. 3120 (Material for flame proof clothing) which will ensure that if the fabric catches alight the flame will quickly extinguish itself, i.e. the flame will die out in eight seconds and the length of the char will not be greater than $4\frac{1}{2}$ inches. Fabrics tested by the second standard must comply with provisions of B.S. 3121 (Fabrics of Low Flammability) which ensure that a flame will take not less than 150 seconds to travel 100 inches up a vertical strip of fabric. This is the level of safety recommended in their 1957 Report by the British Standards Committee on the Flammability of Apparel Fabrics, as a protection against domestic burning accidents. It allows a reasonable time for burning to be extinguished.

The Regulations come into force on May 11th 1959. On and after this date it will be an offence to describe as non-inflammable, or as giving a degree of protection from fire, any textile fabric which does not conform to the requisite prescribed standards. Shoppers buying fabrics which meet the standards will be assured not only that they give a high level of protection but that the processing will not be destroyed by normal laundering.

The period of approximately one month before the Regulations come into force will allow traders time to study the new standards and to adjust their practice where necessary.

The Board of Trade hope that this measure will encourage the use of fire resistant fabrics, particularly for the night clothes of children and old people. This is one of the many precautions which can help to reduce the number of tragic accidents which happen yearly. Care should also be taken to guard coal, gas and electric fires and oil heaters and to avoid so far as possible the use of loose skirts and draperies in light, flammable materials where any risk of fire exists.

Copies of the Regulations (S.I. 1959 No. 616) price 3d. may be obtained from H. M. Stationery Office, Kingsway, London W.C.2. and branches or may be ordered through any newsagent or bookseller. Copies of the British Standards referred to in the Regulations may be obtained from the B.S. Institute, 2 Park St. London W. (price 4/- for B.S.2693, and 3/- each for B.S. 3119, 3120, 3121 and 1547).

In some notes issued by the Board of Trade explanatory of the Regulations it is stated that the old Regulations which were made in 1914 have become out of date. While the test of flammability was fairly stringent (any flame has to converge and die out) there was no test of durability other than four washes with soap and water to ensure that a purely temporary treatment would not pass the test. (Durably flame resistant processes had not been developed commercially in 1914).

Two different standards are necessary to provide on the one hand for fabrics from which an exceptionally high degree of protection is required, e.g. industrial garments, and on the other hand for the bulk of flame resistant materials now available for general use. While many of these may not qualify under the first standard, they are able to provide a high degree of protection which may be expected to last with normal washing for the life of the fabric. If the second standard had not been provided, these durably treated fabrics could not have been described in any way which drew attention to their flame resistant properties. This would not have been in the public interest.

The Regulations do not refer to all the provisions of the British Standards. They adopt the important provisions concerning the performance of a fabric when in contact with flame and concerning the method of test; conformity with these standards is

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required only when the fabric is described in a way which implies that it is flame resistant.

The Regulations apply to any textile fabrics whatsoever which are claimed to have flame resistant properties. They do not restrict the manufacture or processing of fabrics, whether flame resistant or not, nor do they make compulsory the labelling of flame resistant fabrics. The Act lays the duty of enforcement on the Local Authorities, but it does not exclude prosecutions by others.

Over 300 persons were killed in England and Wales in 1957, the last year for which detailed figures are available, as a result of clothing catching fire in homes and residential institutions. A high proportion of these were persons over 65. The total number of non-fatal accidents is not known.

There is no reason to suppose (the Board of Trade adds) that the supply of flame resistant fabrics cannot keep pace with demand.

THE ROYAL SOCIETY FOR THE PREVENTION OF ACCIDENTS

LEGISLATION TO PREVENT BURNING ACCIDENTS IN THE HOME.

A. CHILDREN AND YOUNG PERSONS ACT, 1933 and AMENDMENT ACT, 1952

Section 11, Exposing Young Children Under Seven to Risk of Burning.

"If any person who has attained the age of sixteen years, having the custody, charge or care of any child under the age of seven years, allows the child to be in any room containing an open firegrate not sufficiently protected to guard against the risk of his being burnt or scalded without taking reasonable precautions against that risk, and by reason thereof the child is killed or suffers serious injury, he shall on summary conviction be liable to a fine not exceeding ten pounds:

Provided that neither this section, nor any proceedings taken thereunder, shall effect any liability of any such person to be proceeded against by indictment for any indictable offence."

Children and Young Persons (Amendment) Act, 1952 - Section 8.

Section 11 of the previous Act should be amended as follows:-

- a) By the substitute word of '12' for the word '7'.
- b) By inserting after the words 'fire grate' the words for any heating appliances liable to cause injury to a person by contact therewith'.

The above Amendment came into force on the 1st October, 1952.

The Act now reads as follows:-

" If any person who has attained the age of sixteen years, having the custody, charge or care of any child under the age of twelve years, allows a child to be in any room containing an open fire grate or any heating appliances liable to cause injury to a person by contact therewith not sufficiently protected to guard against the risk of his being burnt or scalded without taking reasonable precautions against that risk, and by reason thereof the child is killed or suffers serious injury, he shall on summary conviction be liable to a fine not exceeding ten pounds:

Provided that neither this section, nor any proceedings taken thereunder, shall affect any liability of any such person to be proceeded against by indictment for any indictable offence".

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B. HEATING APPLIANCES (FIREGUARDS) ACT, 1952

1. Prohibition of sale or letting of unguarded electric fires, gas fires or oil heaters.

If any person in the course of a business sells, or lets under a hire-purchase agreement or on hire, or offers, or exposes for sale, or for letting under a hire purchase agreement or on hire, any appliance required by regulations under this Act to be fitted with a guard, and either the appliance is not fitted with a guard or the guard does not comply with the standards prescribed for it by the regulations, he shall be guilty of an offence, unless -

- (a) he does so as the agent of a person who is not acting in the course of a business or as the servant of such an agent; or
- (b) he reasonably believes that the appliance will not be used in Great Britain; or
- (c) in the case of a letting on hire, the letting is incidental to the letting of premises; or

(overleaf)

1. Prohibition of sale or letting of unguarded electric fires, gas fires or oil heaters. (continued)

- (d) in the case of a letting under a hire purchase agreement, he had at no time possession of the appliance and only became the owner thereof at the time of entering the agreement; or
- (e) in the case of any letting, the letting was lawful at the time the hirer or the hirer's predecessor entitle obtained possession of the appliance.

2. Inspection and testing of appliances.

(1) A local authority may authorise in writing any of its officers to inspect and test appliances required by regulations under this Act to be fitted with guards and any person so authorised, may on producing if required his authority, inspect any such appliances kept on any premises in the area of the authority for the purpose of being sold or let in the course of a business and may test their guards in such a manner as may be prescribed by the regulations.

(2) Any person who wilfully obstructs any person in the exercise of his powers under this section shall be guilty of an offence.

3. Offences

(1) A person guilty of an offence under this Act shall be liable on summary conviction to a fine not exceeding fifty pounds.

(2) Where an offence under this Act which has been committed by a body corporate is proved to have been committed with the consent or contrivance of, or to be attributable to any neglect on the part of, any director, manager, secretary or other similar officer of the body corporate or any person purporting to act in any such capacity, he as well as the body corporate shall be deemed to be guilty of the offence.

In this subsection, the expression "director", in relation to any body corporate which is established by or under any enactment for the purpose of carrying on under national ownership any industry or part of an industry or undertaking and whose affairs are managed by its members, means a member of that body.

4. Power of local authority to prosecute.

A local authority in England or Wales may institute proceedings for any offence under this Act committed in the area of the authority.

5. Regulations

(1) The Secretary of State may make regulations for the purposes of this Act requiring gas fires, electric fires and oil heaters of such descriptions as may be specified in the regulations to be fitted with guards and prescribing for such guards such standards of construction and fitting as are in his opinion appropriate to reduce or prevent the risk of fire or injury resulting from accidental contact with, or proximity to, flames or heating elements.

(2) Any such regulations may prescribe different standards for guards fitted to different descriptions of gas fires, electric fires or oil heaters and may prescribe the means to be used for ascertaining for the purposes of this Act whether any such guards comply with the standards so prescribed for them.

5. Regulations (continued)

(3) Any such regulations may contain such provisions as appear to the Secretary of State necessary or expedient for authorising the sale or letting of appliances manufactured before the coming into operation of the regulations or for authorising the sale or letting of any appliances for such purposes as may be specified in the regulations.

6. Exercise of power to make regulations or an order under S.8.

(1) The power of the Secretary of State to make regulations under this Act and his power to make an order under section 8 of this Act shall be exercisable by statutory instrument.

(2) Any statutory instrument made under this Act shall be subject to annulment in pursuance of a resolution of either House of Parliament.

7. Interpretation

In this Act the following expressions have the following meanings:-

"local authority", as respects in England and Wales, means the council of a county borough or a county district, the council of a metropolitan borough or the Common Council of the City of London and, as respects Scotland, means a county or town council;

"hire-purchase agreement" as respects England and Wales, has the same meaning as in the Hire-Purchase Act 1938, and, as respects Scotland, means a contract to which the Hire Purchase and Small Debt (Scotland) Act, 1932, applies or would apply if the appliances forming the subject of the contract did not exceed twenty pounds in value; and, as respects Scotland references to letting under a hire-purchase agreement and to a hirer under such a letting shall include references to an agreement to sell under a contract to which the said Act of 1932 applies and to a purchaser under such an agreement respectively.

8. Short title, commencement and extent.

(1) This Act may be cited as the Heating Appliances (Fireguards) Act, 1952.

(2) This Act shall come into operation on such day as the Secretary of State may by order appoint.*

(3) This Act shall not extend to Northern Ireland.

* Date appointed 1st October 1954.

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C. Fabrics (Misdescription) Act 1913

Prohibition of Sale with misleading description as to inflammability.

Section 1. "It shall not be lawful for any person to sell, or expose, or have in his possession for sale, any textile fabric either in the piece, or made up into garments, or in any other form, to which is attributed expressly or inferentially the quality of non-inflammability, or safety from fire, or any degree of such quality of non-inflammability or safety from fire -

- (1) by wording or marking, descriptive or otherwise -
(a) upon the material; or
(b) upon any wrapper or band; or

(overleaf)

C. Fabrics (Misdescription) Act, 1913 (Continued)

- (1) (c) contained in any letterpress or writing referring to the material; or
- (2) by verbal representation at the time of sale;

unless such textile fabric conforms to such standard of non-inflammability as may be prescribed by regulations to be made by the Secretary of State, and if any person sells, or has in his possession, textile fabric in contravention of this Act, he shall be liable on summary conviction to a fine not exceeding, in the case of a first offence, ten pounds, or in the case of a second or subsequent offence, fifty pounds.

Cases where vendors purchase under a warranty

Section 3. "Where in any proceedings against a person charged with an offence under this Act, it is proved that an offence under this Act has been committed, but that the person charged with the offence -

- (a) purchased the textile fabric in respect of which the offence was committed from a person resident within the United Kingdom who sold the textile fabric under a warranty that it complied with the prescribed standard of inflammability; and
- (b) took reasonable steps to ascertain, and did in fact believe in the accuracy of the statement contained in the warranty; the person so charged shall be entitled upon an information duly laid by him to have the person who gave the warranty brought before the Court, and that person may be summarily convicted of the offence, and the person originally charged shall be exempt from any fine, and the person so convicted shall in the discretion of the Court, also be liable to pay any costs incidental to the proceedings.

Material found in possession deemed to be for sale

Section 4. "Where a person is charged with having textile fabric in his possession in contravention of this Act, any such material proved in the proceedings to have been found in his possession shall be deemed to be intended for sale as aforesaid unless the contrary is proved.

Powers and duties of local authorities

Section 5. (1) "It shall be the duty of every local authority to enforce the provisions of this Act within their district, and for that purpose any male or female person or officer whom the local authority may appoint shall have power, if so authorised by the local authority, to institute and carry on any proceedings which the local authority is authorised to institute and carry on under this Act".

Sections 7 and 8 apply the Act to Scotland and Northern Ireland respectively.

The Fabrics (Misdescription) Regulations 1959 (S.1. 1959 No.616)

were made by the Board of Trade under Section 1 of the Act and came into force on 11th May 1959.

Paragraph 2 (1) A textile fabric to which a degree of the quality of non-inflammability or safety from fire is attributed shall be deemed to conform to the requisite standard of non-inflammability for the purposes of the Act if, when tested in accordance with the prescribed method

The Fabrics (Misdescription) Regulations 1959

Paragraph 2 (1)(continued)

of test both before and again after being subjected to the appropriate washing treatment specified in Appendix A. to the British Standard No.3121 published on the 23rd day of March 1959, the requisite specimens of the fabrics comply with the requirements set out in Clause 3 of that British Standard.

(2) The method of test specified as Method A (The vertical strip test) in the British Standard No.2963 published on the 18th day of February 1958 is hereby prescribed for the purposes of this regulation.

British Standard 3121: 1959

Clause 2. Flame-resistance rating is a figure derived from the flammability testing of fabrics and is of the same order as the time in seconds necessary for the propagation of the flame over a distance of 100 inches in a vertical strip of fabric.

Clause 3. Any fabric purporting to be of low flammability within the terms of this British Standard shall have a flame-resistance rating of 150 or more, or shall be reported "self-extinguishing" or "flame not propagated" when tested, both in the original state and after treatment in accordance with Clause 4, by method A (the vertical strip test) specified in B.S.2963.

Clause 4 In order to indicate that their flame-resistance rating will continue during their useful lives, fabrics to be described as of low flammability shall fulfil the requirements of Clause 3, after having been subjected to the washing treatment described in Appendix A.

Clause 5. All fabrics or garments presented as complying with this British Standard shall be identified by a statement on the following lines:-

"Low flammability fabric (B.S.3121). If the low flammability properties of the fabric are deleteriously affected by bleaching the description shall add "Do not bleach". "

Appendix A Washing treatment of fabric

Provision is made for washing in a washing machine for half-an-hour in a powerful solution of chemicals and detergents-similar to those used, though in less strong doses, in ordinary laundering processes. Afterwards they are rinsed and dried. The whole treatment is repeated another 11 times.

British Standard 2963: 1958

The principal of Method A: Vertical strip test is that the conditioned strip of fabric is suspended vertically and the lower end is ignited in a standard manner. The progress of the flame over the fabric is timed visually.

The standard contains full details including apparatus, conditioning and testing atmospheres, test procedure and calculation and expression of results.

THE ROYAL SOCIETY FOR THE PREVENTION OF ACCIDENTS

Notes for the use of Lecturers on the Prevention of Burning Accidents.

1. The extent of burning accidents due to the ignition of clothing.

- a) About 700 people die every year from burning accidents in the home. Estimates suggest that at any one time some 550 people are in hospital for treatment of burns, and that about 126,000 people alive today have required in-patient hospital treatment for burns due to ignition of clothing, many suffering permanent after effects.
- b) Surveys by the Burns Unit of the Medical Research Council show that the average period of hospital treatment for clothing burns is 48 days as against 26 days for other burns.
- c) It is estimated that the cost to the tax-payer of hospital treatment for clothing burn cases is about £250,000 a year.

2. Causes of Clothing Burn Accidents

- a) Over one half of reported cases of clothing burns are attributable to exposure to unguarded gas, electric and coal fires. Other sources of ignition are gas ovens, boiling rings matches and ignition of fat, oil or spirit.
- b) Five to ten times as many children under 14 suffer clothing burns than people of 15 to 64 years. The rate for people over 65 is 3 to 4 times that for younger adults. Females suffer twice as many clothing burns as males - the type of clothing worn, the amount of time spent in the home and the nature of their activities doubtless influencing this fact. Disability increases risk of clothing burns, especially liability to heart attacks, epilepsy and other diseases of the nervous system.
- c) Evidence suggests that overcrowding increases the risk of burning accidents. Circumstances which may cause temporary excitement or carelessness, such as weddings, parties, Christmas tree decorating with candles etc., may give rise to fire risks, as may the mirror over the fireplace.
- d) Long loose fitting garments such as nightdresses, dressing-gowns, house coats and fullskirted dresses are more dangerous than close fitting garments like pyjamas.
- e) The textile materials most commonly involved in clothing burns are cotton, and rayon; less frequently involved are acetate, nylon, silk and wool. Cotton and rayon are the fabrics most widely used for nightdresses and other garments most likely to catch fire.

3. Controlling Clothing Burns

The three most immediately controllable factors in preventing clothing burns are - exposure to ignition - the type of fibre used and garment design.

4. Exposure to Ignition -

A. Legislation on Fireguards

- (1) Under regulations issued by the Home Office and Scottish Home Department, no gas, electric or oil burning fire may be sold without an adequate guard. (British Standard test 1945, prescribes the size, strength and distance from the heating element of the guard. British Standard 2788; 1956 lays down similar requirements for open coal fires).

4. Exposure to Ignition (Cont'd.)

A. Legislation on Fireguards

(11) Under the Children and Young Persons Act 1933, amended 1952 it is an offence to expose children under the age of 12 (7 in Scotland) to the risk of burning.

B. Guidance on the Choice of Fireguards

When choosing a fireguard for an open coal fire the following features should be sought for maximum efficiency and safety:-

Mesh of $\frac{1}{2}$ " to 1 inch in size. (no larger).

Means of removing ash and refuelling fire without removing the guard from the fire.

Strong clips on refuelling doors.

Some method of fixing the guard into place, either by staple attachments in tiled surrounds, or by strong spring clips to hold the guard in place by pressure.

Guards which embody these features include:-

British Standard Guards conforming to B.S.2788 Specification. Designs vary within the specification and are made by the following firms:-

George Baker Ltd., Cecil Street, Birmingham 19.

* H.W.Carter and James Ltd., Wenman Street, Birmingham 12.

Claremont Wire Goods Ltd., Winchester Works, Old Hill, Staffs.

Cameron Robb Ltd., 174 Charles Henry Street, Birmingham 12.

Joseph Nichols & Son Ltd., Cheapside, Birmingham 12.

* George Venables Ltd., Wire Works, 19 Bradwall Road, Sandbach, Cheshire.

* Hygienic Wire Works Ltd., Miles Road, Mitcham, Surrey.

Duke, Waring, Crisp & Co., 155 Vauxhall Street, Kennington Oval, London S.E.11.

(* Licenced to use 'Kitemark'.)

Nursery Guards

Genyk Nursery Guard, Hygienic Wire Works Ltd., Mitcham, Surrey.

Nursery Fire Guard. Duke, Waring, Crisp & Co.,
155 Vauxhall Street, Kennington Oval
London S.E.11.

Spring Fastened Fireguards

"Braddell" guards, Duke, Waring Crisp & Co., (as above)

"Double Safety de Luxe" guards. Kleerun Trap Co.Ltd.,
Lane End, High Wycombe, Bucks.

These last two makes are suitable for grates where no staple can be set in the surround.

Guards for other Types of Fire

Guards for gas and electric fires can be obtained from local Gas and Electricity Showrooms.

Oil burning heaters may need the additional safeguard of a nursery type guard that can be fixed by staples to the wall, and it is always advisable to fix electric fires high on the walls of bathrooms, with cord pulls, not ordinary wall switches.

5. A. Type of Fibre Used

A flame-resistant fabric has been defined as one which will not burn, or burn so slowly as to allow time to extinguish the flame or discard the burning fabric and thus obviate severe injury to the wearer.

The test for calculating the degree of flame resistance of a fabric and thus making relative comparisons (provided all fabrics are tested under the same conditions) is the measurement of the speed at which a flame travels up the fabric which is suspended vertically (100 ins.), in that position the flame is most readily propagated and the transfer of heat from the flame to unburnt fabric ahead is greatest. The resulting measurement is referred to as the flame-resistance rating.

B. Inherent properties of fabrics affecting flame-resistance rating.

There are in this country only very few fabrics (at present) which burn abnormally quickly and present a positive fire risk.

The flame resistance of a fabric is partly dependent on the fibre from which it is made, and fibres can be grouped according to the flame resistant properties at any given weight per sq. yard.

The majority of fabrics made from cellulosic fibres (cotton, jute, hemp, linen, viscose and cuprammonium rayon) weighing less than 7 ozs. per sq. yard have a flame resistance of between 25 and 70. These fabrics constitute about $\frac{3}{4}$ of the production of clothing textiles.

Wool fabrics weighing more than 7 ozs. per sq. yard usually do not ignite, or have a high flame resistance and low burning risk.

Fabrics of cellulose triacetate and secondary acetate burn vertically rather more slowly than similar fabrics of certain types made from other cellulosic fibres. The partly burned fabric tends to drop away so reducing the intensity of the flame and rate of burning.

Pure nylon and pure Terylene (and certain other thermoplastic fibres) shrink away from the igniting flame and so present a comparatively small fire hazard, though these fabrics, stiffened with certain synthetic resins may be flammable.

Flame resistance is related to fabric weight as well as fibre content, the heavier the fabric the higher the flame resistance - a 6 oz. cotton fabric will have twice the flame-resistance of a 3 oz. fabric.

C. The Incidence of Clothing Burns in relation to flame-resistance of fabrics.

The bulk of accidents involve fabrics having a rating in the range of 25 to 60; these fabrics are the most frequently worn and most frequently used for the more risk prone types of garment.

D. Chemical Treatment. rendering fabrics flame proof or flame-resistant.

In considering the suitability of individual flame resistance treatments, the following points should be borne in mind:-

- i) That the life of the process should be comparable with the life of the garment.
- ii) The process should not adversely affect the 'handle' or other properties of the fabric.

5. D. Chemical Treatment rendering fabrics flame proof or flame resistant. (cont'd.)

iii) Any process should be non-toxic, either by sucking, inhalation or by skin reaction.

iv) Treatments which increase cost of fabrics are likely to be unpopular.

E. Treatment for Fabrics

The treatments given below conform to these points, and are suitable for cellulosic (i.e. cotton, linen, viscose and cuprammonium rayon) fibres.

i) Proban

The patent rights of this process are controlled by Proban Limited, a joint subsidiary of the Bradford Dyers Association Ltd., and Albright & Wilson (Mfg.) Ltd. The principal underlying this process is the formation of insoluble resins in the fibre.

ii) Antiflamm

This process was evolved by the Associated Lead Manufacturers Ltd., working in collaboration with Horrockses, Crewsdon & Co., Ltd. It is a compound of antimony oxide applied to fabrics so as to form an insoluble resin in and around the fibres.

iii) Nylon nets and laces

Flame proofing processes have been developed by the Lace Research Association and John Heathcoat Ltd., (Heathcoat 'Flare Free' Nylon Net.)

F. Legislation on Flame-resistant Fabrics

Regulations made under the Fabrics (Misdescription) Act 1913 made it an offence, after May 11th 1959, to offer for sale textile fabrics claimed to be flame-proof or to have any degree of flame-resistance unless they can pass tests laid down in the appropriate British Standard. B.S.3121: 1959 lays down that any fabric purporting to be of low flammability shall have a flame resistance rating of 150 rating or more i.e. it must take at least 150 seconds for flame to travel 100 inches of the material. To qualify for the label "Low flammability fabric (B.S.3121)" samples of the fabric must retain their flame-resistant properties after 12 successive washings in a washing machine in a strong solution of chemicals and detergents. If the flammability properties of the fabric are deleteriously affected by bleaching, the description shall add "Do not bleach".

The fabrics which have been subjected to the treatments referred to in 5.E i) - iii) above comply with the requirements of B.S.3121.

The Act lays the duty of enforcement on local authorities, but it does not exclude prosecution by others

6. Education of Public

The following measures are suggested:-

- i) The public should be educated in the nature and extent of domestic fire risks by all organs of publicity, including press and broadcasting. This should emphasise that all kinds of exposed flame in proximity to textiles create risk: it should stress the necessity of adequately guarding coal, gas and electric fires and oil burning heaters, and the need for care with flammable fluids, matches, defective electrical appliances and connections.

6. Education of Public (Cont'd.)

- ii) Steps should be taken to minimise the special risk of burning injuries to children and old people. This is particularly directed to parents; education, health and welfare authorities; and institutional and hospital managements.
- iii) The need for vigilance at times of festivity and excitement is stressed.
- iv) Public attention should be drawn to the special fire risks involved in wearing (especially by children and also by the old and infirm) of long, loose-fitting clothing which might catch on fire or make the wearer trip and fall on an igniting source. The number of burning accidents would be substantially reduced by the general adoption of pyjamas instead of night-dresses for children, and the attention of the public, the garment industry, home-dressmakers, needlework instructors, and paper pattern makers is drawn to this recommendation.
- v) The public should be on their guard when buying fabrics for although a standard has been established for flame-resistance of fabrics, there is nothing in the regulations to prevent the offering for sale of highly flammable fabrics without any label at all.

The development of reliable and acceptable flame-resistant and flame-proofing processes should be promoted, as widely and rapidly as possible. The stimulation of a public demand for them by a campaign of public education would undoubtedly contribute to such a development.

APPENDIX

SUGGESTIONS FOR A DEMONSTRATION ON THE FLAMMABILITY OF FABRICS.

- 1. Flammability of Fabrics in relation to type of fibre.
 - a) Natural fibres - Pure cotton, pure silk, pure wool (preferably of equal weight)
 - b) Manmade fibres - Nylon, Terylene, rayon.
 - c) Mixed fibres - Silk and wool, wool and cotton, Terylene and wool, nylon and cotton.
- 2. Flammability of Fabrics in relation to weight of fabrics
 - a) Cotton net, cotton lawn, cotton drill.
 - b) Pure wool nun's veiling, doctors' flannel, tweed or heavy suiting.
- 3. Flame-resistant Fabrics
 - a) 'Flare-Free nylon net.
 - b) Winceyette - Anti-flamm treated.
 - c) Winceyette - Proban treated.
- 4. Highly Dangerous Fabrics

Bonded interlining fabrics.

Other equipment needed:-

metal holder for fabrics (e.g. scissors, tongs),
metal tray, candle, matches.