FOR COMMENTS ONLY

PROPOSAL FOR A

COMPULSORY

DOMINICA NATIONAL STANDARD

LABELLING OF COMMODITIES

PART 4: SPECIFICATION FOR CARE LABELLING OF TEXTILES

DNS 2: Part 4: 2002

COMMENTS BEGIN ON: **CLOSING DATE FOR COMMENTS:**

Send Comments to:

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Amendments

Amendment No.	Date of Issue	Text Affected

Committee Representation

The preparation of this standard was carried out under the supervision of the **Labelling Technical Committee**, which at the time comprised the following members -

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0.0 FOREWORD

0.1 This Standard was approved for adoption by the National Standards Council on February 20, 2002 for use as a Dominica National Standard (DNS) and is the fourth in a series of Standards on Labelling of Commodities.

0.2 Compulsory status has been recommended in an effort to prevent fraud and deception arising from misleading labelling to protect the consumer or user against danger to health or safety, as well as to give adequate information to the consumer or user and to generally ensure the quality of goods and services.

0.3 Many goods for retail sale are commonly sold prepackaged by the manufacturer, the packager, or the retailer. It was therefore recognized that provisions for the information to be given on labels of textiles would help the consumer or purchaser to assess the quality of goods and their relation to his/her needs and resources.

0.4 It is also intended to assist manufacturers in meeting the labelling requirements imposed by regional and extra-regional markets.

0.5 This standard will be effective as a compulsory standard on a date to be notified by the Minister responsible for the Bureau of Standards in a notice to be published in the Dominica Gazette as required by the Standards Act No. 4 of 1999.

0.6 In the formulation of this standard assistance has been derived from Caribbean Common Market Standards Council (CCMSC) now known as CARICOM Regional Organisation for Standards and Quality (CROSQ).

1.0 SCOPE

1.1 This standard applies to a system of symbols for labelling of textile articles (piece goods, and made-up textiles such as clothing and home furnishings), hereinafter referred to as the "textile". To indicate suitable "care" procedures for restoring the creased or soiled textile, symbols are provided for five operations: washing, bleaching, drying, pressing and dry cleaning.

1.2 The symbol system relates only to the properties of color fastness and dimensional stability of piece goods and components of made-up textiles, in washing, bleaching, drying, pressing and dry cleaning. It has no direct relation to the ability of the labelled textile to wear or otherwise perform satisfactorily in service. (For example, although the components of a garment may be satisfactory with respect to the properties defined by this standard, the performance of the garment may be unsatisfactory due to the inadequacy of other properties of the components or to improper methods of garment fabrication).

2.0 DEFINITIONS

The following definitions are given for the purpose of this standard:

2.1 **Textile Article** - thread (yarn, flax thread or wire), material in pieces and articles, ready made up principally from textile material.

2.2 **Washing Treatment** - an operation to clean the article in a water bath. The washing treatment involves the combination of the following operations:

(i) The soaking, the pre-wash, the actual wash, the rinse affected by the usual action of heat by mechanical agitation and detergents, or other products in the washing treatment.

(ii) The extraction of water, that is to say drying by machine, twisting, dripping, etc. affected at the end of the foregoing operations.

(iii) These operations can be carried out by machine or by hand.

2.3 **Bleaching Treatment** - operating in bath water, usually in the course of washing treatment necessitating the use of a bleaching agent intended to eliminate certain stains from the textile article and to make it whiter.

2.4 **Ironing and Pressing Treatment** - operation effected on an article in order to make it smooth and neat or in order to return its original form and aspect by the use of an appropriate instrument.

2.5 **Dry Cleaning** - process for cleaning textile articles by means of organic solvents. This process consists of the cleaning, proper rinsing, spinning, drying and restoring to shape.

3.0 LAUNDERING, DRY CLEANING AND OTHER HAZARDS

Factors that can cause damage to textile goods include the following:

3.1 **Laundering Hazards:**

a) Washing when the article concerned shall not be washed.

b) Rough handling, twisting or rubbing.

c) Washing at too high a temperature.

d) The use of chlorine bleach on goods that shall not be bleached.

e) The use of starch or other finishing agents on articles that have a flame resistant finish.

f) Drying in direct sunlight or close to direct sources of heat.

g) Fugitive dyeing of other laundry.

3.2 **Dry Cleaning Hazards:**

a) Dry cleaning when the article concerned shall not be dry-cleaned.

b) The use of inappropriate dry cleaning solvent.

3.3 **Pressing and Ironing Hazards**:

a) Ironing and pressing at too high a temperature.

b) Steam pressing when the article concerned shall not be steam pressed.

Textile goods which are liable to suffer damage by unsuitable laundering or dry cleaning treatment shall be marked appropriately by selection from the list of words, phrases and graphic symbols given in this standard. If no special procedure needs to be followed, then articles shall be labelled **FULLY WASHABLE** and/or **DRY CLEANABLE**. The instructions chosen shall apply to the whole article including trims if their removal is not advised.

4.0 LABELLING

4.1 Care labels shall comprise:

1) washing instructions
2) bleaching instructions
3) drying instructions
4) ironing and pressing instructions
5) dry cleaning instructions and
6) cautionary statements, selected as required but always presented in this order

4.2 Lettering shall be clearly legible and shall withstand the recommended cleansing processes for the life of the article.

4.3 For made-up articles, the labels wherever possible shall be securely fastened to the article. The labels for garments shall be in a conspicuous position, wherever possible in the back of the neck or waistband and associated with the manufacturer or supplier's label. Additionally, a swing ticket, pamphlet or suitably printed material may be used to convey information contained in the label to the public.

4.4 For piece goods to be sold retail, a swing ticket shall be attached to each roll of material. Additionally, a pamphlet, which is freely available to the public, may be provided. Labels shall also be provided for permanent attachment to the made-up article but in this case it shall be clearly indicated that recommendations relate only to fabric.

4.5 For other textile materials the label shall take the form of a ticket affixed to the hank, ball, etc., e.g. of hand knitting yarns. Labels shall be so applied that they will remain firmly attached throughout the useful life of the textile.

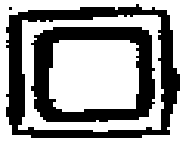
5.0 DESCRIPTION OF SYMBOLS

5.1 The following five basic symbols shall be used, with the specified supplementary markings indicated in this standard:

5.1.1 **The Washtub** – The washtub represents home-type or commercial washing. It shall give an indication of the maximum recommended washing temperature.

5.1.2 **The Triangle** – The triangle represents bleaching. It shall indicate Bleaching with care in chlorine-type bleach. The bleaching symbol shall never be used alone, but always in conjunction with a washing symbol. It shall be used on white articles only.

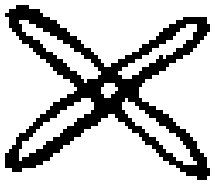
5.1.3 **The Square** – The square represents drying.



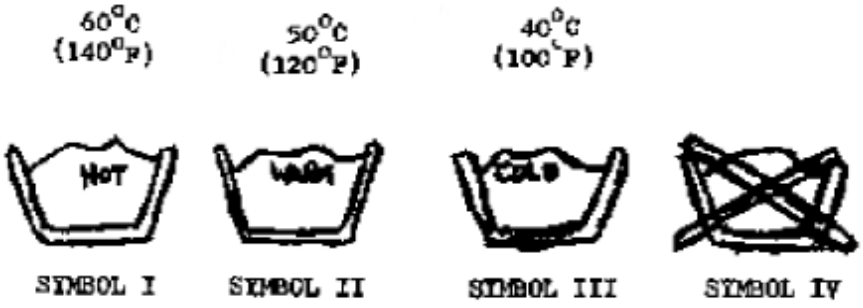
5.1.4 **The Hand Iron** – The hand iron represents hand ironing and also pressing on commercial equipment in laundering and cleaning plants. Irons shall indicate the recommended iron or pressing temperatures.

5.1.5 **The Circle** – The circle represents dry cleaning in the commercial systems using perchloroethylene or petroleum solvent.

5.1.6 **The Cross-of St. Andrew** – The cross of St. Andrew when placed on one of the above symbols indicates that the treatment represented by that symbol is prohibited.



5.2 **Washing Symbols**



1. Meaning of symbol I – A textile (including all components) that bears this symbol shall be machine and hand washable in hot water, i.e. water not exceeding 60°C (140°F).

2. Meaning of symbol II – A textile (including all components) that bears this symbol shall be machine and hand washable in warm water, i.e. in water not exceeding 50°C (120°F).

3. Meaning of symbol III – A textile (including all components) that bears this symbol shall withstand gentle hand washing and machine washing in cold water, i.e. at a temperature not exceeding 40°C (100°F).

4. Meaning of symbol IV – a textile that bears this symbol shall not be washed.

5.3 **Bleaching Symbols**

SYMBOL I

SYMBOL II

1. Meaning of symbol I – A textile (including all components) that bears this symbol shall be washable at the temperature indicated by the accompanying washing symbol, in a washing solution that contains sodium hypochlorite in a concentration not exceeding 100 p.p.m. available chlorine.

2. Meaning of symbol II – A textile that bears this symbol shall not be bleached in chlorine-type bleach.

5.4 **Drying Symbols**

SYMBOL I

SYMBOL II

SYMBOL III

SYMBOL IV

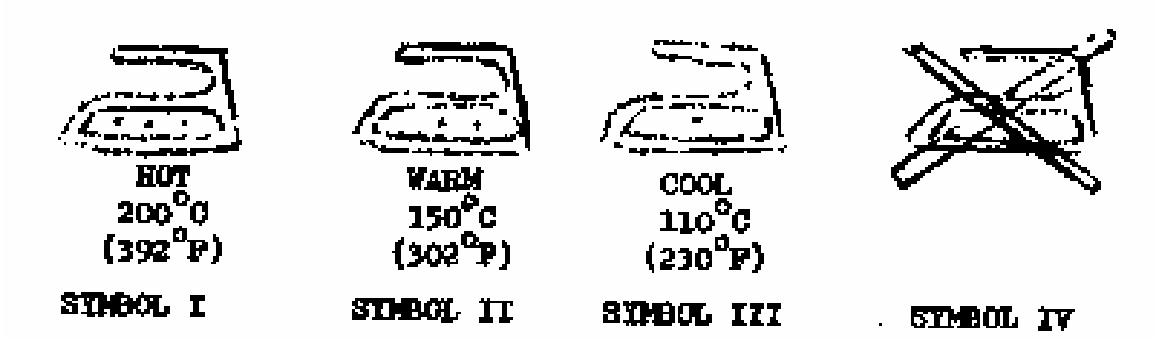
1. Meaning of symbol I – A textile that bears this symbol may be dried in the shade or in a tumble dryer at a low tumbling temperature. Most articles bearing this symbol may also be dried by the drying procedure described by symbols II and III.

2. Meaning of symbol II – A textile bearing this symbol shall preferably be hung up to dry.

3. Meaning of symbol III – A textile bearing this symbol shall be hung up dripping wet to drip dry.

4. Meaning of symbol IV – A textile bearing this symbol shall be dried on a suitable flat surface.

5.5 Ironing Symbols



For an interim period in addition to the symbol, the words “cool”, “warm” or “hot” shall also appear on the label.

It must be stressed that the indications of types of fabrics that can be issued on each setting is only a general guide and it is the responsibility of the textile manufacturer to label garments with appropriate instructions. In mixture fabrics the setting selected shall be the one applicable to all.

It is the responsibility of the iron manufacturers to explain how to achieve the iron settings with each particular model.

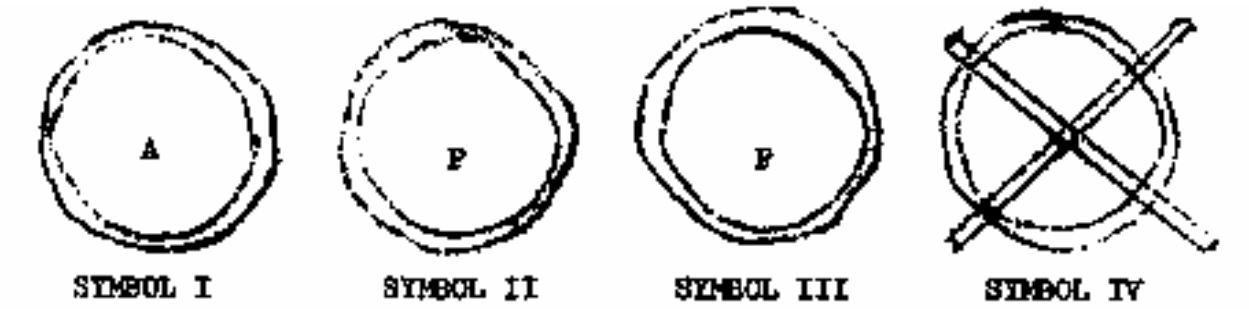
1. Meaning of symbol I - A fabric that bears this symbol shall be pressed or ironed with a hot iron i.e. at a temperature of up to and including 200° C (392°F). (For cotton, linen, rayon or modified rayon).

2. Meaning of symbol II - A fabric that bears this symbol shall be pressed or ironed with a warm iron i.e. at a temperature of up to and including 150°C (302°F). (For polyester mixtures, wool).

3. Meaning of symbol III - A fabric that bears this symbol shall be pressed or ironed with a cool iron i.e. at a temperature of up to and including 110° C (230°F). (For acrylic, nylon, acetate, triacetate polyester).

4. Meaning of symbol IV - A fabric that bears this symbol shall not be pressed or ironed. This symbol is for fabrics where ironing would be detrimental to the fabric, and not on easy care fabrics to imply that ironing is not necessary.

5.1.1.5 **Dry Cleaning Symbols**



1. Meaning of symbol I – A fabric that bears this symbol shall be dry-cleaned in all solvents..

2. Meaning of symbol II - A fabric that bears this symbol shall be dry-cleaned in perchloroethylene, Hydrocarbons, solvent 113 and solvent 11.

3. Meaning of symbol III - A fabric that bears this symbol shall be dry-cleaned in Hydrocarbons and solvent 113.

4. Meaning of symbol IV - A fabric that bears this symbol shall not be dry-cleaned.

5.7 **Colors of symbols**

The symbols may be used in black and white or color as required. Colored symbols shall be used in the three conventional "traffic lights" colors only, green, amber and red.

5.7.1 **GREEN** indicates that no special precautions are necessary.

5.7.2 **AMBER** indicates that some caution is necessary.

5.7.3 **RED** indicates prohibition, that is, the operation represented by the symbol

shall not be carried out. The red symbol always has a red "X" super imposed on it.

5.8 **Use of Symbols**

5.8.1 The restorative treatments recommended by the symbols shall, unless otherwise stated on a firmly attached label, apply to the whole textile, including trim, buttons, zippers, linings, etc.

5.8.2 A sufficient number of symbols shall be used to ensure restoration of the textile to an acceptable usable condition and shall include a crossed-out symbol for an operation that shall be avoided, for example:

1. For a textile that is washable but not dry cleanable (e.g. fabrics containing solvent-soluble colors, many glass fiber drapes) the symbol warning against dry cleaning shall be shown along with the appropriate washing symbol.

2. For a textile normally considered washable but that is in fact only cleanable (e.g. certain knitted fabrics) the symbol warning against washing shall be shown along with the appropriate dry cleaning symbols.

3. For textile normally considered bleachable in chlorine-type bleach but that may in fact be damaged by it (e.g. certain resin-finished white fabrics that will yellow in chlorine bleach) the symbol warning against chlorine bleaching shall be shown along with the washing symbol.

5.8.3 When two or more symbols are shown on a textile or on a label they shall appear in the following order:

Washtub

Triangle

Square

Iron

Circle

5.8.4 Symbols shall be placed on the textile or on a suitable label to be permanently attached to the textiles and shall be produced by printing, weaving or other means. They shall be legible, and shall be capable of repeatedly withstanding the restorative treatments they represent throughout the useful life of the article.

6.0 DETERMINATION OF SUITABILITY OF TEXTILE ARTICLES TO UNDERGO CARE TREATMENT

6.1 **Criteria**

For the estimation of the suitability of a textile article to support care treatment without damage and for a maximum cleaning effect, the following criteria must be taken into consideration:

6.1.1 The state of the article after treatment - The textile can be greatly damaged by heat, washings, chlorine solution and organic solvents. The destruction will be manifested by the decomposition of the material, its melting or shrinking under the influence of heat, its yellowing (discolouring) under the influence of heat or chemical products etc.

6.1.2 Physical appearance of article after treatment can produce a noticeable deterioration of the appearance of the article that is impossible to remove by ironing.

6.1.3 Dimensional variation of the textile article caused by some treatments. Color and print fastness.

6.1.4 Resistance of the trimming and of the accessories of the article considered as a whole.

6.2 **Methods of test**

The methods of test to be used for the estimation of the ability of the articles to withstand the care treatments shall be the ones approved by the appropriate authority.

6.3 **(Minimum) Levels of Performance**

6.3.1 Color fastness - when tested according to the approved methods for chlorine and washing the textile shall not show a change in shade or staining greater than gray scale 4-5 contrast.

6.3.2 **Dimensional Stability**

6.3.2.1 Woven, warp-knit and double-knit fabrics - The maximum dimensional change shall not exceed 2% in either direction when tested according to the appropriate approved method. If the dimensional change exceeds 2% the symbol must be used if the dimensional change is within the limits shown on a securely attached label.

6.3.2.2 Single-waft- knit fabrics - The symbols shall be used if the maximum dimensional change, in either direction is within the limits shown below -

TABLE 1
MAXIMUM DIMENSIONAL CHANGE OF FABRIC IN PERCENTAGE (%)

END USE	**MAXIMUM DIMENSIONAL CHANGE IN EACH DIRECTION (%)**
Underwear, T- shirts, sleepwear	10
Blouses, sport shirts	8
Dresses, coats, jackets, slacks, skirts and otherwomen's casual wear	4
Sweaters	6

6.3.2.3 Articles that shrink or stretch more than these maximum values shall bear the appropriate symbol, if the dimensional change is within the limits shown on a securely attached label.

6.3.2.4 Damage due to retained chlorine – A textile that bears the chlorine symbol shall not show yellowing greater than gray scale 4-5 or more than 10 percent loss in breaking strength when tested according to the approved method.

APPENDIX A

Method for the Determination of the Maximum Safe Ironing Temperature of Fabrics

A.1 **Introduction** - This test method is intended for classifying fabrics for ironing purposes. It involves ironing of the cloth specimens with a heated aluminum block at increasing temperatures and examination for changes in handle and appearance. The fabrics must then be labelled in accordance with the ironing section of this code in terms of the test temperatures they will withstand as indicated below:

1.	Up to 110°C	COOL IRON
2.	Up to 150°C	WARM IRON
3.	Up to 200°C	HOT IRON

This test determines the highest setting at which a fabric must be ironed without actual fiber or fabric damage occurring. It does not take into account slight thermal shrinkage that can occur with some thermoplastic fibers, which must require a fabric to be ironed at a lower setting than the one obtained from the test. Where this factor is significant, it can be taken into consideration in assessing the recommended iron setting.

This test is not intended to determine color fastness properties but any significant change below the maximum safe ironing temperatures shall be noted.

A.2 **Definition** – Maximum safe ironing temperature of a fabric is the highest test temperature at which no sticking, discoloration, stiffening or other **changes in handle or appearance occur.**

A.3 **Apparatus** – The following apparatus is required:

A.3.1 An aluminum block, 10 cm in diameter and 5 cm deep, with a hole in the center 0.6 cm in diameter and 4 cm deep, perpendicular to the upper flat face. The block is fitted with a carrying handle, and the total weight of the block plus handle shall be 1150 ± 20 g. The base to have a matte finish – unpolished.

A.3.2 A suitable means for heating the aluminum block, other than a naked flame, e.g. an electric hotplate.

A.3.3 A 0°C - 360°C mercury in glass thermometer.

A.3.4 Silicone grease or Wood's metal.

A.3.5 An asbestos sheet.

A.3.6 A horizontal ironing board covered by one layer of 0.6 cm felt and two layers of cotton fabric.

A.4 Conditioning and testing atmospheres - The atmospheres required for preconditioning and testing are:

A.4.1 For preconditioning – An atmosphere of relative humidity of between 10 % and 25 % and temperatures not exceeding 50°C.

A.4.2 For conditioning and testing – An atmosphere of relative humidity 65 % ± 2 % at a temperature of 27°C ± 2°C.

A.5 Specimens – A specimen, preferably 15 cm × 15 cm, of the fabric to be tested, is required for each temperature level chosen.

A.6 Procedure

1. Expose the specimens in the atmosphere for preconditioning as defined in A.4 for not less than four hours and then condition them in the atmosphere for conditioning and testing as defined in A.4 until they have reached equilibrium. Equilibrium with the atmosphere for testing shall be deemed to have been reached when the textile material does not show a progressive increase in mass of more than 0.25% in successive exposures to the moving air of not less than two hours duration.

2. Place the thermometer in the hole in the block with silicone grease or Wood's metal for good thermal contact. Heat the block to a temperature at least 5 °C above that required for the test. Place the block on the asbestos sheet and when the thermometer indicates the desired temperature immediately transfer the block to the specimen resting on the ironing board and leave it for 30 seconds. If the size of the specimen is restricted, the block shall be placed on it to cover about one half of the area of the specimen.

3. Raise the block and if the specimen sticks to the base, remove it. Allow the specimen to cool.

4. Assess the specimen for discoloration, stiffening or other changes in appearance and handle. In the case of a slight discoloration allow the pattern to condition for 24 hours and then re-examine it.

5. Repeat the test on other specimens on an unused portion of the ironing board-to determine the maximum temperature at which no sticking, discoloration, stiffening or other changes in appearance occur. It is recommended that the first test shall be at a safe low temperature and further tests shall be done at temperatures with 10 °C intervals. The maximum safe ironing temperature can then be expressed and the appropriate iron setting deduced.

A.7 **Report** - Report the maximum safe ironing temperature.