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The Importance's of Care Labeling in Apparels and Textiles

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ABSTRACT: The purpose of apparel care is to give the consumers accurate care information to extend the useful life of the apparel. Manufacturers and importers of textiles, apparel and piece goods and any organization that controls the manufacturing or import of textile wearing apparel or piece goods for making wearing apparel are covered. The object of this care labeling is to increase life management skills and save money by properly caring for clothing. Water plays a major role in how clean the laundry is hardness or softness, level and temperature all affect the laundry process. During laundry fabric sorting, color, fabric construction, drying time, choice of detergent plays an important role in it. This Paper presents how the care label are important for apparels and what is present fabric care scenario in India.

KEYWORDS: Care label, Sodium hypochloride, GINETEX, Hardness.

I. INTRODUCTION

Apparels and textiles are soiled during their normal use. From economic point of view these items must be cleaned and refurbished for reuse without substantially altering their functional and aesthetic properties. Consumers should be provided the knowledge of various processing conditions for care of the apparels. This is the joint responsibility of the apparel industry and the textile care industry and the consumer. [1, 6]

According to Federal Trade Commission's (FTC) rule 16 CFK 423, apparels should have permanent care label that provides information about their regular care. The purpose of the rule is to give the consumers accurate care information to extend the useful life of the apparel. Care labels should not be considered as a guarantee or a quality mark of the product.. [1]

According to ASTM D 3136-96, a care label is a label or other affixed instructions that report how a product should be refurbished. FTC defines "care label means a permanent label or tag, containing regular care information and instruction that is attached or affixed in some manner that will not become separated from the product and will remain legible during the useful life of the product. [1]

II. LITERATURE REVIEW

Proper care of textiles will determine the durability and attractiveness of a textile product during usage. Care of textiles may include airing, washing, bleaching, drying and ironing, dry cleaning, stain removal (Lauw 1987). Four factors are important in laundering or dry cleaning of textiles and these are; temperature, time, washing medium and mechanical action (Hollen 1988, Joseph and Marjory 1981). These four have to be optimized for effective care of textiles. Particular laundering procedures have to be selected basing on the fiber and its properties for example strength, sensitivity to chemicals and temperature. Additional limitations may be imposed by yarn fabrication processes, fabric construction method and special finishes.

The provision of care symbols indicates the recommended procedures which avoid risk causing damage to the textile product being treated (Mohler 1988). The care symbols usually show the harshest procedure which is acceptable for the product (Joseph 1988). The recommendation is usually based on the most sensitive property. After care characteristics are usually established through tests. Journal of Studies in Social Sciences 83 Joseph (1988) defines a care label as a permanent label or tag containing regular care information and instructions. A care label is a pictogram for example a wash tub with hand symbol showing hand washing. The care label should not become separated from

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the product and should remain legible during the use of the product. Hollen et al (1979) and Pizzutas et al (1999) refer to the "Textile Fiber Product Identification Act" which is of American Origin; this act requires that all apparel and textile products be labeled as to fibre content. Prior to this act, a fabric could have been falsely labeled for example silk when it may be an imitation. The regulations governing the labeling of textiles stipulate that the word silk may be used only on fibres obtained from the cocoon of the silk moth. The authorities indicate that phrases like artificial silk and man made silk, silk jersey, silk damask for cotton are not allowed. Such phrases" confuse consumers and may result in incorrect care procedures on textile products. Joseph (1988) is of the view that the act protects the consumer from false advertising and also ensures that the consumer is provided with basic information on what they are buying and how to care for it. McArthur et al(1997) are of the view that a good care label should contain fibre content, any special treatments or finish, cleaning instructions and size of garment.

III. HOME LAUNDRY FACTS

U.S. consumers perform over 660,000,000 wash loads every week. In general, these wash loads are performed by women who do 88% of the home laundry. As a rule of thumb, manufacturers of washable apparel anticipate a life expectancy of 50 washings for their products. The time span covered by these 50 laundering varies widely from less than a year for products that get washed regularly like under-wear and socks, to several years for items that are worn seasonally or only for special occasions. Many laboratories use testing protocols that mimic results for up to 50 washings to predict garment life cycle performance. Consumers, on average have 8 laundry products in the laundry room: 3 types of detergent, 1 regular sodium hypochlorite bleach, 1 oxygen color- safe bleach, 2 fabric softeners (a liquid and dryer sheets), and 1 stain remover. Virtually every household has some type of detergent on hand (99%). 87% of households have a sodium hypochlorite bleach on hand and 76% have an oxygen, color- safe bleach. Colored items are the most frequent type of wash load (36% of all loads) followed by whites (18%) and mixed colors loads (18%). All colored loads are driving the increase in the overall number of wash loads. All/mostly cotton loads show a similar increase. Combined, the obvious driver for increased wash loads is colored cotton apparel. This reflects the rise in consumer demand for this type of apparel.

IV. LAUNDRY ESSENTIALS

Fabric Sorting: It is also known as 'Laundry sorting'. Proper laundry sorting is important to prevent laundry problems like dye transfer from one garment to another, shrinking clothes and unsightly lint accumulations over the rest of the wash. Follow care labels, if there is any doubt about proper care. Sort laundry loads according to the following sequence:-

Colour: Whites and pastels together, same colour bright, dark colours. Multicoloured items with lots of white background are best washed separately first. If colors do not bleed or run, then they can be washed with other items in the future.

Fabric and Construction: Separate delicate or lightweight fabrics from heavier items. Separate lint givers (terrycloth) from lint catchers (corduroy). Loosely knit sweaters, lingerie or items with delicate trim require gentle care and need to be separated from heavier items like jeans. Different fabrics need different laundry care. Be sure to read and follow the care label directions.

Degree of Soil: Heavily soiled work or play clothes should be washed separately from lightly soiled laundry. Wash diapers and soiled bed linens separately to avoid contaminating other clothes. Always keep pesticide-soiled clothing separate from family laundry before and during washing.

Avoid risk of damage to items: Taking an extra minute to check clothing prior to washing can save serious problems later. Pockets with crayons, tissues, lipstick or other surprises can leave laundry streaked with shredded tissues or a rainbow of stains. Before washing be sure about Empty pockets, Shake out loose dirt from cuffs, Close zippers and other fasteners to prevent snagging and fabric tearing, Mend rips or tears before laundering to prevent further damage, Tie strings and sashes loosely to avoid tangling, Remove belts, pins, trim or ornaments that are not washable.

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V. LAUNDRY PRODUCTS

Successful laundry results start with the right laundry products. Here's a checklist of laundry essentials;

Detergents: Detergents work to effectively remove soil and prevent lint and soil from re-depositing on clothes. Follow directions for the proper amount and measure, don't guess. Extra detergent is needed for large loads, extremely dirty clothes, or hard water. Likewise less detergent is required for small loads, lightly soiled clothes, or soft water. More laundry problems are usually caused from using too little detergent rather than using too much. Granular detergents are recommended for hard water conditions and when loads contain mud or clay soil. Liquid detergents are especially good for cold water washing and for cleaning greasy, oily stains.

Bleach: You can keep washables whiter and brighter longer when bleach is used in every washload. Choosing the right bleach is easy.

Household Liquid Bleach: Sodium hypochlorite is also the most effective bleach for stain removal and whitening. This is the bleach of choice for whites and colorfast garments. It pays to do the bleach-safe test when you think a garment should be bleachable. Clorox laundry studies confirm that about 52 percent of all washables are actually safe with household liquid bleach. Other laundry studies show how liquid bleach is safe for fabrics, when used as directed. This bleach does not wear down fabrics any more than detergent alone, washload after washload.

Colour-Safe Bleach: It is bleach that is safe to use on washable, colored clothes. These bleaches, available in powder and liquids, remove stains and help keep colors bright. The powdered bleaches also have enzymes to break up tough protein stains, which is why they make an excellent pre-soak. Colour-safe bleach is not diluted bleach. The gentle bleaching action in liquids is from hydrogen peroxide. Powders commonly use sodium perborate. These color-safe bleaches also have optical brighteners. This ingredient is like an invisible layer on fabrics. It reflects light, making colors appear brighter and white's whiter.

Prewash Soil and Stain Removers: These products are formulated to help get clothes stain free. Their special detergents and enzymes penetrate stains and break them up, helping detergents work more effectively to wash stains away.

Fabric Softeners: Fabric Softeners help reduce static cling, minimize wrinkling and soften clothes. Rinse-added softeners are added to the final rinse cycle. These can be added automatically in washers equipped with a fabric softener dispenser. Otherwise, diluted softener must be added manually to the final rinse. Dryer sheets are convenient to use with one sheet added to the dryer along with the clothes.

Water: Water plays a major role in how clean the laundry is hardness or softness, level and temperature all affect the laundry process. Soft water aids in the cleaning process, while hard water can create some problems. Hard water minerals, such as calcium and magnesium, react with soaps to form a sticky curd that is difficult to rinse out of clothes. It also reduces the cleaning ability of detergents. If your water is extremely hard, a softening treatment system can be installed. If only the hot water supply is treated, hardness will vary with the wash cycle chosen. Water containing excessive iron must be treated to prevent rust stains on clothes. In hard water, detergents that contain silicate or carbonate builders can deposit insoluble particles on clothes making them feel harsh and look dull. Choosing the proper water level and temperature is vital for best cleaning. Use a hot water wash for most white fabrics and heavily soiled colored fabrics. Warm water is recommended for very lightly soiled or brightly colored garments, and most other laundering needs. With increased concern for energy conservation, many consumers are lowering hot water heater thermostats as well as washing in cooler water. While this saves energy, laundry results are not always satisfactory. For effective cleaning, hot water heaters should be set no lower than 120°F, but hotter water up to 140°F gives better cleaning results. Water temperatures below 65°F would not activate some laundry additives and may cause lint, residue, and poor cleaning. Detergent manufacturers and care labels define cold water as 65- 85°F.

VI.DRYING TIME

Before putting garments into the dryer, shake them out so they are loose, not bunched up. This will allow quicker drying. Always check that stains are removed before drying. Heat can permanently set some stains making them impossible to remove. Avoid over-drying, which can cause shrinking and wrinkling. Remove clothes from the dryer as soon as it shuts off. For maximum drying efficiency, clean the lint filter after each load.

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VII. VARIOUS SYSTEM OF CARE LABELLING

At present, there is no universal symbol system. The ASTM symbols are accepted in NAFTA countries. ISO/GINETEX symbols are accepted in most of Europe and Asia, and Japan has their own symbol system. Negotiations are under way to harmonise the two major systems; ASTM and GINETEX, into a truly universal symbol system for care procedures. Among the various systems the major systems, which are followed worldwide are listed below [1]

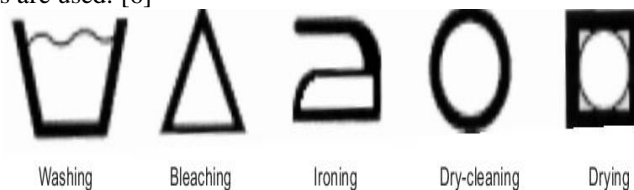
1. International care labelling System (GINETEX)
2. ASTM care labelling system
3. British care labelling system
4. Japanese care labelling system
5. Canadian care labelling system
6. Indian care labelling system

International Care Labelling System: International symposium for care labelling was established in 1963 in Paris. It was replaced by International Association for Textile Care Labelling (GINETEX) in 1975. The symbols used in GINETEX system represent that the garment can withstand the process and a cross indicates the process is not possible for the garment. [1, 6]

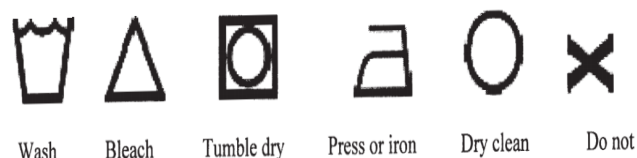
GINETEX has the following objectives:

- To define symbols for textile care at an international level
- To define the regulations for the use of the said symbols
- To promote the propagation of the care symbols
- To acquire all markings and all rights relative to the symbols
- To register all marks, both national and international
- To insure protection for all marks and symbols as adopted in all the member countries of the Association

The following five symbols are used: [6]



ASTM Care labelling system: In the ASTM System there are five basic symbols: washtub, triangle, square, iron and circle indicating the process of washing, bleaching, drying, ironing or pressing and dry-cleaning respectively. The prohibitive symbol "X" may be used only when evidence can be provided that the care procedure on which it is superimposed would adversely change the dimensions, hand, appearance, or performance of the textile. The symbols are described below. [1, 2, 3]



Indian Care labelling system: The symbols used in Indian care labelling system are same as that of International care labelling system. The five basic symbols are washtub, triangle, iron, circle, circle inside a square for the processes of washing, bleaching, ironing, dry-cleaning, and tumble drying processes respectively. The cross symbol superimposed on any of the basic symbols indicates the treatment is not permitted. As Negotiations are under way to harmonise the two major systems; ASTM and GINETEX, into a truly universal symbol system for care procedures.

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VIII. LAUNDRY CARE IN INDIA

The Indian fabric wash market consists of synthetic detergents (comprising bars, powder and liquids) and oil-based laundry soaps and per capita consumption of detergent in India (2.7 kg pa) is lower than any other country. Current value laundry care market in 2013-14 is around Rs. 120 billion. According to a couple of reports, the Indian Laundry Industry is estimated at INR 2,20,000 crore, of which the unorganised market (dhobis, maid servants, and mom-and-pop stores) valued at INR 5,000 crore. The sector is fragmented with 7,67,000 establishments, 98% of which are micro-sized laundries with fewer than 10 workers. The organised segment comprises a mere 2-3% of the entire laundry market in India. No wonder, given the latent potential for the laundry sector in the top 10 cities of India and more, many startups have mushroomed to take a crack at it. According to Tracxn, there are over 100 startups in this space, with total funding in this space amounting to \$6.2 Mn.

IX. CONCLUSIONS

For consumers care symbols make sense when they can understand and follow the instructions. Symbols should provide the same information to everyone without language barriers. It is also very much essential for the garment manufacturers to make awareness campaign regarding the utility of care labels for the consumers. However, while applying the care labels it is very important for the garment manufacturers to understand the comfort criteria of care labels. Smaller labels cost less to buy or manufacture and also cost less to inventory. Eliminating the need for different labels for different countries can further reduce total inventory. So, all the manufacturers should attach care labelling instructions to the garment for the benefit of the consumers and to keep their brands at a higher position. Due to globalisation and liberalisation processes it becomes more relevant for the garment manufactures to use care labelling systems in the apparel.

The laundry basics haven't changed from the old days to the today's advanced machines and are more important than ever. This was a quick refresh to get sparkling- clean results, wash load after wash load. There is a need of social transformation of fabric care in India. There is a huge business potential for organized laundry care for personalized fabric care with world class technology at affordable prices at consumer's doorstep.

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