

# GB18401-2010 CHINESE NATIONAL GENERAL SAFETY TECHNICAL CODE FOR TEXTILE PRODUCTS

#### **BACKGROUND OF THE STANDARD**

Since the 1990s, safe, nontoxic and environmental friendly consumption has been very popular globally, and environmentally friendly and sustainable development concepts have been developed and expanded. As a result, the safety of textile products has attracted wide attention. To help protect the safety of consumers all over the world, and to effectively enhance the quality of China's textiles and clothing, the China General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China adopted a National General Safety Technical Code for Textile Products: GB 18401-2003 on November 27, 2003. GB 18401-2003 became effective on January 1, 2005. Approved by General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, Standardization Administration of The People's Republic of China, the new revision of GB 18401-2010 <National general safety technical code for textile products> was published on January 14, and it will be in effect since August 1, 2011.

## THE EFFECTIVENESS AND SOCIAL INFLUENCE

GB18401-2010 was established in accordance with the Standardization Law and Product Quality Law of People's Republic of China, which is equal to technical regulations. If products fail to meet the safety requirements, they are not allowed to be manufactured, sold or imported into China's market. So far, national general safety technical code for textile products, a mandatory national standard, has been one of the most influential textile standards in China market. The standard contains the principal requirements for textile products imported into China's market, and it is the basis for China to carry out quality supervision.

### **LEGAL LIABILITY FOR VIOLATION OF THE STANDARD**

As prescribed in the Standardization Law and Product Quality Law of People's Republic of China, any violation of the standard shall be punished in accordance with related laws and regulations.

# PRODUCTS THAT ARE IN THE SCOPE OF THE STANDARD

This standard is applicable to the manufacture and sale of garment, decorations and household textile products in China.

They are classified into three categories:

- Textile products for infants
- Textile products with direct contact to skin
- Textile products without direct contact to skin





#### PRODUCTS THAT ARE NOT IN THE SCOPE OF THE STANDARD

- Textile products for construction use such as geotextiles, water proof linoleum ground cloth, etc.
- 2. Industrial textile products such as papermaking blanketry, awning cloth, filtrate cloth, and insulated textiles, etc.
- Agricultural textile products such as soil-less cultivation ground cloth, etc.
- Special protection products such as gas proof, radiation proof, high temperature endurance products, etc.
- String and net products such as fishing net, cables, and climbing cables, etc.
- 6. Packaging products such as sacking and parcel packaging, etc.
- 7. Medical products such as medicated gauze and bandages, etc.
- 8. Cloth handcrafted or soft toys
- 9. Cloth handcrafted products
- Outdoor products such as cloth for advertising light boxes, awning cloths and tents, etc.
- 11. Sanitary products that are disposable in nature
- 12. Umbrellas, shoes, suitcases or backpacks, etc.
- 13. Carpets

## **TECHNICAL REQUIREMENT**

ITEM		TESTING METHOD	Category A	Category B	Category C
Formaldehyde content (mg/kg) ≤		GB/T 2912.1	20	75	300
pH Value <sup>a</sup>		GB/T 7573	4.0 - 7.5	4.0 - 8.5	4.0 - 9.0
Colourfastness <sup>b</sup> (grade) ≥					
Water	colour change, stain	GB/T 5713	3 - 4	3	3
Acid Perspiration	colour change, stain	GB/T 3922	3 - 4	3	3
Alkaline Perspiration	colour change, stain	GB/T 3922	3 - 4	3	3
Dry Rubbing		GB/T 3920	4	3	3
Saliva	colour change, stain	GB/T 18886	4	-	-
Odour		GB 18401 6.7	None		
Cleavable carcinogenic arylamines AZO dye ° (mg/kg)		GB/T 17592 GB/T 23344	Forbidden		

## Remarks:

- <sup>a</sup> The pH value can be adjusted to 4.0~10.5 for non-end products that must undergo wet processing in further processing procedures.
- <sup>b</sup> Not applicable to: non-end products that must undergo washing and fading processes, products that are of original colour or bleached products; traditional handcrafted products such as tie dyed or wax printed products. Only infants products need to be tested for colourfastness to saliva.
- <sup>c</sup> Please see standard's appendix for list of Cleavable carcinogenic arylamines, limit value: ≤ 20 mg/kg.
- Textile products for infants should comply with requirements in category A;
- Products in direct contact with skin should at least comply with requirements in category B;
- Products not in direct contact with skin should at least comply with requirements in category C.

The main technical differences between GB 18401-20010 and GB 18401-2003 are listed below:

- Adjusted the scope of standard, deleted "Use", retained "manufacture" and
  "sale" of textile products in China, also added "household textile products" in the
  standard scope;
- The definition of infant age has been altered from 24 months to 36 months, and the products normally suitable for infants of the height has been changed from 80cm to 100cm;
- The pH requirement of textile products which need to meet Category B has been changed from 4.0~7.5 to 4.0~8.5;
- '4-Aminoazobenzene' has been added to the list of cleavable carcinogenic arylamines in appendix C, there are 24 forbidden carcinogenic arylamines totally;
- Appendix D <Sampling guideline> has been added for reference;
- Add the note that the hanging products, such as curtains, will be exempted from testing requirement of colourfastness to perspiration;
- Adjusted some examples for textile product categorisations in Appendix B, and revised Appendix A to add and revise more textile products examples not included in the scope of this Standard.

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