

Draft GB Standard On Health And Safety Requirements Of Footwear

The Standardization Administration of the People's Republic of China (SAC) is in the process of drafting a new mandatory standard to define the health and safety requirements (see **Table 1**) of footwear, test methods, sampling and interpretation of results. This footwear standard was drafted in October 2007 with reference to the technical requirements given in EC Directives 2002/231/EC, 2002/61/EC and 2003/3/EC, which is applicable to footwear made up with various kinds of materials and techniques.

In this draft standard, footwear products are categorized into 2 classes, for which both are required to comply with the safety and health requirements as specified in **Table 1**.

- **Class A: Infant's footwear**
- **Class B: Footwear other than Infant's footwear**

This draft GB standard is now in circulation by the WTO Secretariat, and the final date for comments is 14 June 2008.



Table 1 – Technical Specifications for Health and Safety Requirements of Footwear

Component	Test Item		Unit	Limits		Test Method
				Class A	Class B	
Uppers, linings & insoles	pH value	Leather	---	3.5 – 7.0		QB/T 2724-2005
		Synthetic leather, Artificial leather, Textile materials	---	4.0 – 9.0		GB/T 7573-2002
	Free formaldehyde	Leather	mg/kg	≤ 150	≤ 300	GB/T 19941-2005
		Synthetic leather, Artificial leather, Textile materials	mg/kg	≤ 75		GB/T 2912.1-1998
	Azo colourants ^{1,2}	Leather	mg/kg	Not allowed ³		GB/T 19942-2005
		Synthetic leather, Artificial leather, Textile materials	mg/kg			GB/T 17592-2006
	Extractable Heavy Metals	Lead (Pb)	mg/kg	≤ 1.0		GB/T 17593.1-2006
		Cadmium (Cd)	mg/kg	≤ 0.1		GB/T 17593.1-2006
		Arsenic (As)	mg/kg	≤ 1.0		GB/T 17593.4-2006
	Pentachlorophenol (PCP)	Leather	mg/kg	≤ 5		IUC-25
		Synthetic leather, Artificial leather, Textile materials	mg/kg	≤ 0.5		GB/T 18414.1-2006 or GB/T 18414.2-2006
		Chromium (VI) [Cr (VI)]	mg/kg	≤ 10		IUC-18
	Linings and insoles	Colourfastness to rubbing ⁴	Grade	≥ 3	2 – 3	ISO 17700-2004

¹ Refer to **Annex A** for the list of forbidden amines resulted from the reductive cleavage of the dyestuff.

² If 4-aminodiphenyl and/or 2-naphthylamine were detected with concentration over 30 mg/kg, base on the existing scientific knowledge, the presence of these forbidden amines cannot be reliably ascertained without other additional evidence.

³ Detection limit: 30 mg/kg.

⁴ Follow Method A to use the artificial sweat solution for 50 rubs. Use the grey scale for assessment of colour staining.

Annex A – List of Forbidden Amines obtained from Reductive Cleavage of the Dyestuff

Table A.1 – Category 1 Arylamines which are carcinogenic to human beings

Chinese Name	Name of Amine	CAS No.
4-氨基联苯	4-Aminobiphenyl	92-67-1
联苯胺	Benzidine	92-87-5
4-氯-邻甲基苯胺	4-Chloro-o-toluidine	95-69-2
2-萘胺	2-Naphthylamine	91-59-8

Table A.2 – Category 2 Arylamines which are carcinogenic to animals, and are suspected to be carcinogenic to human beings

Chinese Name	Name of Amine	CAS No.
邻氨基偶氮甲苯	2-Aminoazotoluene	97-56-3
2-氨基-4-硝基甲苯	2-Amino-4-nitrotoluene	99-55-8
对氯苯胺	p-Chloroaniline	106-47-8
2, 4-二氨基苯甲醚	2,4-Diaminoanisole	615-05-4
4, 4' -二氨基二苯甲烷	4,4'-Diaminodiphenylmethane	101-77-9
3, 3' -二氯联苯胺	3,3'-Dichlorobenzidine	91-94-1
3, 3' -二甲氧基联苯胺	3,3'-Dimethoxybenzidine	119-90-4
3, 3' -二甲基联苯胺	3,3'-Dimethylbenzidine	119-93-7
3, 3' -二甲基-4, 4' -二氨基二苯甲烷	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0
2-甲氧基-5-甲基苯胺	p-Cresidine	120-71-8
4, 4' 亚甲基-二-(2-氯苯胺)	4,4'-Methylene-bis-(2-chloroaniline)	101-14-4
4, 4' -二氨基二苯醚	4,4'-Oxydianiline	101-80-4
4, 4' -二氨基二苯硫醚	4,4'-Thiodianiline	139-65-1
邻甲苯胺	2-Toluidine	95-53-4
2, 4-二氨基甲苯	2,4-Toluyldiamine	95-80-7
2, 4, 5-三甲基苯胺	2,4,5-Trimethylaniline	137-17-7
邻甲氧基苯胺	2-Anisidine	90-04-0
2, 4-二甲基苯胺	2,4-Xylidine	95-68-1
2, 6-二甲基苯胺	2,6-Xylidine	87-62-7