

Technical Requirement for Environmental Products

The Certificable Technical Requirement for Environmental Labelling Products

Ecotypic Textile

HJBZ 30—2000
Replace HJBZ 6—1994
Replace HJBZ 30—1998

1 Scope

This technical requirement specifies the basic requirements, technical contents and test methods for environmental labelling product of Ecotypic Textile.

This technical requirement shall apply to all textile except moth resistance finish hair and its blending textile.

2 Standards cited

Provisions in the following standards are cited in this technical requirement, and therefore form the provisions in this standard. They have the same effectiveness as the technical requirement itself.

GB/T 2912.1—1998 Textiles--Determination of formaldehyde--Part 1: Free and hydrolyzed formaldehyde (Water extraction method)

GB/T 3920—1997 Textiles--Tests for colour fastness--Colour fastness to rubbing

GB/T 3922—1997 Textiles--Testing method for colour fastness to perspiration

GB/T 5713—1997 Textiles--Tests for colour fastness--Colour fastness to water

GB/T 7573—1987 Textiles--Determination of pH of the aqueous extract

GB/T 17592.1—1998 Textiles--Test method of the use of banned azo colourants Gas chromatography/mass spectrography method

GB/T 17593—1998 Textiles--Test method of heavy metal ions--Atomic absorption spectrophotometry

DB22/T 141—1997 Determination for residue level of organo-chlorine pesticide in textile

DB22/T 142—1997 Determination for residue level of 2, 4, 5,—T in textile

DB22/T 143—1997 Dermination for residue level of 2, 4, 5,—D in textile

DB22/T 144—1997 Determination for residue level of toxaphene in textile

In case of the criteria above are revised, the latest version should be applied.

3 Definition

"Ecotypic Textile" refers to , in this technical requirement, products properly utilizing less harmful or harmless raw materials to ambient and having no harm to human health.

4 Basic requirements

4.1 Quality of products shall conform with requirement of relevant product quality standards.

4.2 Pollutant emission of the company should be obliged to conform with pollutant emission standards nationally or locally.

Approved by SEPA on 01/27/2000

Entered into force on 01/27/2000

5 Technical contents

- 5.1 Products should not be bleached with material containing chlorine.
 5.2 Products should not conduct treatment of rot resistance and fire retardation.
 5.3 Do not permit add pentachlorophenol and 2, 3, 5, 6—tetrachlorophenol into the products.
 5.4 Products should not have moldy smell, gasoline odor and toxic aromatic odor.
 5.5 Do not permit using carcinogenic colorants, sensitization colorants, azo dyes capable of decomposing to toxic aromatic amine listed in annex A.
 5.6 Formaldehyde, extractable heavy metal content, pH of leach solution, color fastness and residue level of insecticide should conform with the requirement in table below.

Items	Unit	Limit	Product for infant	Product directly contacting skin	Product not directly contacting skin	Decorative material	
PH	—	—	4.0-7.5	4.0-7.5	4.0-9.0	4.0-9.0	
Formaldehyde			20	75	300	300	
Extractable heavy metal	As	mg/kg	≤	0.2	1.0	1.0	1.0
	Pb			0.2	1.0	1.0	1.0
	Cd			0.1	0.1	0.1	0.1
	Cr			1.0	2.0	2.0	2.0
	Cr(IV)			Do not permit to be detectable (limit of detection, 0.5mg/kg)			
	Co			1.0	4.0	4.0	4.0
	Cu			25.0	50.0	50.0	50.0
	Ni			1.0	1.0	1.0	1.0
Hg	0.02	0.02	0.02	0.02			
Insecticide			0.5	1.0	1.0	1.0	
Color fastness	Waterproof	Grade	≥	-	3	3	3
	Perspiration proof			-	3-4	3-4	3-4
	Dry friction			4	4	4	4
	Wet friction			2-3	2-3	2-3	2-3

Note: As, Hg and insecticide should only apply to natural fiber;

Criteria for evaluation for colour fastness to water and colour fastness to perspiration is "colour change of original sample".

6 Test

- 6.1 Technical contents described in 5.1, 5.2, 5.3 and tests for carcinogenic colorants and sensitization colorants should be conducted by field inspection.
 6.2 Technical content in 5.4 should be conducted by method of smell; and certification should be provided by test authority.
 6.3 Determination for formaldehyde content specified in technical contents should be conducted according to method described in GB/T 2912.1-1998.
 6.4 Determination for pH of leach solution specified in technical contents should be conducted according to method described in GB/T 7273-1987.
 6.5 Determination for residue level of extractable heavy metal specified in technical contents should be conducted according to method described in GB/T 17593-1998; Artificial sputa should be used to conduct extraction for infant products, whereas artificial acid perspiration for the rest three kinds of product.
 6.6 Determination for residue level of insecticide specified in technical contents should adopt methods given by DB22/T 141 - 1997, DB22/T 142 - 1997, DB22/T 143 - 1997, DB22/T 144 - 1997.
 6.7 Determination for azo dyes specified in technical contents should be conducted according to method described in GB/T 17592.1-1998; limit of detection should be 20mg/kg.
 6.8 Color fastness specified in technical contents should be determined by given methods in GB/T 3920 - 1997, GB/T 3922 - 1997 and GB/T 5713 - 1997.

Annotations:

This technical requirement has been prepared by Department of science and technology, standards of State Environment Protection Administration.

The State Environment Protection Administration keeps the right of interpretation for this technical requirement.

Annex A (annex of the standard)

A.1 Decomposed toxic aromatic amine which is not allowed to release in reduction condition

English name	Chinese name	CASRN
4-Aninobiphenyl	4-氨基联苯	92-67-1
Benzidine	联苯胺	92-87-5
4-Chloro-o-toluidine	4-氯-邻甲基胺	95-69-2
2-Naphthylamine	2-萘胺	91-59-8
o-Aminoazotoluene	邻氨基偶氮甲苯	97-56-3
2-Amino-4-nitrotoluene	2-氨基-4-硝基甲苯	99-55-8
p-Chloroaniline	对氯苯胺	106-47-8
2,4-Diaminoanisole	2, 4-二氨基苯甲醚	615-05-4
4,4'-Diaminobiphenylmethane	4, 4'-二氨基二苯甲烷	101-77-9
3,3'-Dichlorobenzidine	3, 3'-二氯联苯胺	91-94-1
3,3'-Dimethoxybenzidine	3, 3'-二甲氧基联苯胺	119-90-4
3,3'-Dimethylbenzidine	3, 3'-二甲基联苯胺	119-93-7
3,3'-Dimethyl-4,4-diaminobiphenylmethane	3, 3'-二甲基-4, 4'-二氨基二苯甲烷	838-88-0
p-Cresidine	2-甲氧基-5-甲基苯胺	120-71-8
4,4'-Methylene-bis- (2-chloroaniline)	4, 4'-亚甲基-二- (2-氯苯胺)	101-214-4
4,4'-Oxydianiline	4, 4'-二氨基联苯醚	101-80-4
4,4'-Thiodianiline	4, 4'-二氨基二苯硫醚	139-65-1
o-Toluidine	邻甲基苯胺	95-53-4
2,4-Toluylendiamine	2, 4-二氨基甲苯	95-80-7
2,4,5-Trimethylaniline	2, 4, 5-三甲基苯胺	137-17-7
o-Anisidine	邻氨基苯甲醚	90-04-0
2,4-Xylidine	2, 4-二甲基苯胺	95-68-1
2,6-Xylidine	2, 6-二甲基苯胺	87-62-7

A.2 Carcinogenic colorants

English name	Chinese name	C. I. index number	CASRN
C.I. Acid Red 26	C.I. 酸性红26	C.I.1150	3761-53-3
C.I. Basic Red 9	C.I. 碱性红9	C.I.425000	25620-78-4
C.I. Direct Black 38	C.I. 直接黑38	C.I.30235	1937-37-7
C.I. Direct Blue 6	C.I. 直接蓝6	C.I.22610	2602-46-2
C.I. Direct Red 28	C.I. 直接红28	C.I.22120	573-58-0
C.I. Disperse Blue 1	C.I. 分散蓝1	C.I.64500	2475-45-8
C.I. Disperse Yellow 3	C.I. 分散黄3	C.I.11855	2832-40-8

A.3 Sensitization colorants

English name	Chinese name	C. I. index number	CASRN
C.I.Disperse Blue 1	C.I.分散蓝1	C.I.64500	2475-45-8
C.I.Disperse Blue3	C.I.分散蓝3	C.I.61505	2475-46-9
C.I.Disperse Blue 7	C.I.分散蓝7	C.I.62500	3179-90-6
C.I.Disperse Blue 26	C.I.分散蓝26	C.I.63305	
C.I.Disperse Blue35	C.I.分散蓝35		
C.I.Disperse Blue 102	C.I.分散蓝102		
C.I.Disperse Blue 106	C.I.分散蓝106		
C.I.Disperse Blue 124	C.I.分散蓝124		
C.I.Disperse Orange 1	C.I.分散橙1	C.I.11080	2581-69-3
C.I.Disperse Orange 3	C.I.分散橙3	C.I.11005	730-40-5
C.I.Disperse Orange 37	C.I.分散橙37		
C.I.Disperse Orange 76	C.I.分散橙76		
C.I.Disperse Red 1	C.I.分散红1	C.I.11110	2872-52-8
C.I.Disperse Red 11	C.I.分散红3	C.I.62015	2872-48-2
C.I.Disperse Red 17	C.I.分散红17	C.I.11210	3179-89-3
C.I.Disperse Yellow 1	C.I.分散黄1	C.I.10345	
C.I.Disperse Yellow 3	C.I.分散黄3	C.I.11855	2832-40-8
C.I.Disperse Yellow 9	C.I.分散黄9	C.I.10375	6373-73-5
C.I.Disperse Yellow 39	C.I.分散黄39		
C.I.Disperse Yellow 49	C.I.分散黄49		

Annex B (Annex of the standard)

Insecticides

English name	Chinese name	CASRN
2, 4, 5-T	2, 4, 5滴	93-76-5
2, 4-D	2, 4滴	97-75-7
Aldrine	艾氏剂	309-00-2
Carbaryl	甲萘威	63-25-2
DDD	一羟二萘基二硫醚	53-19-0, 72-54-8
DDE	滴滴意	3423-82-6, 72-55-9
DDT	滴滴涕	50-29-3, 789-02-6
Dieldrin	狄氏剂	60-57-1
Endosulfan, α -	硫丹, α	959-98-8
Endosulfan, β -	硫丹, β	33213-65-9
Endrine	异狄氏剂	72-20-8
Heptachlor	七氯	76-44-8
Heptachloroepoxid	七氯环氧化物	1024-57-3
Hexachlorobenzene	六氯化苯	118-74-1
Hexachlorcyclonhexane, α -	α -六六六	319-84-6
Hexachlorcyclonhexane, β -	β -六六六	319-84-7
Hexachlorcyclonhexane, γ -	γ -六六六	319-84-8
Lindane	林丹	58-89-9
Mirex	灭蚊灵	2385-85-5
Methoxychlor	甲氧滴滴涕	72-43-5
Toxaphene	毒杀芬	8001-35-2
Trifuralin	氟乐灵	1582-09-8