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**PROFESSIONAL STANDARD
OF THE PEOPLE'S REPUBLIC OF CHINA
中华人民共和国轻工行业标准**

QB/T 1333-2010

Replaces QB/T 1333-2004

**Handbag and Knapsack
背提包**

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Foreword

This standard is the revision to QB/T 1333-2004 "Handbag and Knapsack".

Compared with QB/T 1333-2004, this standard has the main changes as follows:

- Adjust the "Scope";
- Add normative references in "Normative References";
- Cancel "Terms and Definitions";
- Adjust "classification according to variety" and add corresponding requirements;
- Add the requirements for "materials and auxiliaries", "harmful matter limit", "specification and permissible deviation" and "marking";
- Adjust "the requirements of shell fabric" in "appearance quality" to "the requirements of shell fabric and lining fabric";
- Adjust the requirements of "specified weight bearing"; adjust the test method of "weight bearing" to "Oscillation and impact test";
- Improve the requirements of "zipper durability";
- Refine the test method of "colour fastness to rubbing";
- Add the requirements of "corrosion resistance of metal fittings";
- Add test requirements of "lock";
- Add "special type inspection";
- Modify "determination of qualification";
- Add "transportation and storage".

This standard is proposed by the China National Light Industry Council.

This standard is under the jurisdiction of the National Technical Committee on Leather of Standardization Administration of China (SAC/TC 252).

Drafting organizations of this standard: Guangdong Shenglilai Leather Product Co., Ltd. and Guangzhou Shark Leather Product Co., Ltd.

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From the implementation date hereof, this standard replaces original light industry professional standard QB/T 1333-2004 "Handbag and Knapsack".

The previous editions of the standards replaced by this standard are:

- QB/T 1333-1991;
- QB/T 1333-1996;
- QB/T 1333-2004.

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QB/T 1333-2010

Handbag and Knapsack

背提包

1 Scope

This standard specifies the product classification, requirements, test methods, inspection rules, marking, labeling, packing, transportation and storage of handbag and knapsack.

This standard is applicable to various handbags and knapsacks for daily life use. Handbags and knapsacks which have special purpose may adopt by reference.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated reference, only the dated editions are applicable to this standard. For undated references, the latest edition (including all amendments) is applicable to this standard.

GB/T 2912.1-1998 Textiles-Determination of Formaldehyde-Part 1: Free and Hydrolized Formaldehyde (Water Extraction Method)

GB/T 3920-1997 Textiles-Tests for Colour Fastness-Colour Fastness to Rubbing

GB/T 17592-2006 Textiles-Determination of the Banned Azo Colourants

GB 19340-2003 Adhesives for Footwear and Base and Bag

GB/T 19942 Leather and Fur-Chemical Tests-Determination of Banned Azo Colourants (GB/T 19942-2005, ISO/TS17234: 2003, MOD)

GB 20400 Leather and Fur-Limit of Harmful Matter

GB 21550-2008 The Restriction of Hazardous Materials in Polyvinyl Chloride Artificial Leather

QB/T 1586.1 Hardware Fitting of Case and Bag-Case-lock

QB/T 2002.1 Hardware Fitting of Leather-Technical Conditions of Electroplated Coating

QB/T 2002.2 Hardware Fitting of Leather-Technical Conditions of Surface Spray Coating

QB/T 2537 Leather-Tests for Colour Fastness-Colour Fastness to Cycles of to-and-fro Rubbing

QB/T 2922 Case and Bag-Test Method for Fall Down

3 Product Classification

3.1 Classification according to variety (surface material)

- a) Leather handbags and knapsacks;
- b) Artificial leather and synthetic leather handbags and knapsacks;
- c) Reproduced leather handbags and knapsacks;
- d) Fabrics shell fabric handbags and knapsacks;
- e) Handbags and knapsacks adopting various materials as the shell fabric;
- f) Handbags and knapsacks of other materials.

3.2 Classification according to type (structure)

- a) Knapsacks with various shoulder straps;
- b) Handbags with various handles;
- c) Bags used both as handbags and knapsacks with various shoulder straps and handles.

4 Requirements

4.1 Materials and auxiliaries

Adopt in accordance with relevant product standards.

4.1.1 Harmful matter limit

Harmful matter limit of leather and reproduced leather shall meet the requirements of GB 20400 and those specified in Table 1; for polyvinyl chloride artificial leather material, harmful matter limit shall meet the requirements of GB 21550-2008; harmful matter limit of fabrics material shall meet the requirements specified in Table 1 and the limit of harmful substances of adhesives for bags and suitcases shall meet the requirements specified in Table 2.

Table 1 Harmful Matter Limit of Leather, Reproduced Leather and Fabrics Materials

Item	Limit value
Dissoluble harmful aromatic amine dye/ (mg/kg)	≤30
Free formaldehyde /(mg/kg)	≤300

Note: The banned aromatic amine names are detailed in Appendix A of GB 20400. If the content of 4-aminobiphenyl and (or) 2-naphthyl amine exceeds 30mg/kg and there are no other evidences, the existing scientific knowledge can not judge whether banned azo colourants are used.

Table 2 Limit of Harmful Substances of Adhesives Used for Bags and Suitcases

Item	Index
Benzene/(g/kg)≤	5.0
Methylbenzene+dimethylbenzene /(g/kg)≤	200
Free toluene diisocyanate ^a /(g/kg)≤	10.0
Normal hexane /(g/kg)≤	150

Dichloromethane	Halohydrocarbon /(g/kg)≤	50.0
1, 2-dichloroethane		
1, 1, 2-trichloroethane		
Trichloroethylene		
Trichloroethylene		
Total volatile organic compound/(g/L)≤		750
^a This item shall be tested for polyurethane adhesive.		

4.1.2 Bag lock

It shall meet the requirements of QB/T 1586.1 or relevant product standards.

4.1.3 Hardware fitting

It shall meet the requirements of QB/T 2002.1 and QB/T 2002.2.

4.2 Specification

The product specification shall meet the design requirements, and the permissible deviation is ±5mm.

Note: The longest distance of appearance length of the product main body is the product specification.

4.3 Appearance quality

It shall meet the requirements specified in Table 3.

4.4 Marking

—The material name and marking coincide with materials used by product;

—According to the classification requirements of 3.1, a single product shall be marked when its used some category of surface layer material exceeds 20% of the total area of product used surface layer material;

—Above 90% surface material adopts top layer leather (except top layer of action leather), "genuine leather" is permissible to be marked;

—Action leather and leather split material shall be marked definitely with the type style of "action" and "splitting";

—For the materials made of multiple compositions, the matrix thickness of leather shall not be larger than 60% of total thickness and shall not be marked with "leather".

Table 3 Appearance Quality

No.	Inspection item		Requirements	
			High-class products	Qualified products
1	Integral appearance		The appearance is plump; the arc line is natural, paste is flat, angles are symmetrical; upright, clean and tidy	The appearance is plump; the arc line is natural, paste is flat, angles are symmetrical; basically upright clean and tidy
2	Shell fabric	Leather and reproduced leather	Uniform in thickness, without cracked grain, crazing or decoloration phenomenon. The surface is flat; the front and rear surfaces are without breakage; visible impression and crease are not allowed to exist	Uniform in thickness, without cracked grain, crazing or decoloration phenomenon. The surface is flat; the front and rear surfaces are without breakage; two rough spots are allowed to exist at the back surface and the bottom with area not larger than 9mm ² . Two unobvious creases are allowed to exist

		Artificial leather, synthetic leather	Without impression, unevenness and pimple	Without visible impression, unevenness and pimple
		Fabric	Without broken warp, broken weft; without skipped silk, skipped thread, impression, stain and defect	The main position is without broken warp, broken weft, skipped silk, skipped thread, visible impression, stain and defect; two minor defects are allowed to exist at the minor position
3	Lining		Flat, regular, clean and tidy; without broken surface, broken warp, broken weft, yarn jumping, cracking and edge disperse.	
4	Suture		Adopt suture suitable for the quality of shell fabric and lining fabric; the quality, color and lustre shall be appropriate to each position	
5	Suture line		The upper and lower threads are matched and the suture line is straight; the stitch lengths are consistent; the handbag and knapsack surfaces are not allowed to have empty stitches, missing stitches and skipping stitches. Suture line skewness is not allowed to exist	The upper and lower threads are matched and the suture line is straight; the stitch lengths are consistent; the handbag and knapsack front surfaces and front covers are not allowed to have empty stitches, missing stitches and skipping stitches. Skewness of suture line with length exceeding 15mm is not allowed to exist. For a single product, the number of upper empty stitch, missing stitch and skipped stitch shall not exceed one; the number of empty stitch, missing stitch and skipped stitch shall not exceed two.
6	Zipper		The suture is straight and even, the side distances are consistent, the opening and closing of zipper is smooth; without misalignment, off teeth and decoloration	
7	Auxiliaries		Bright; without rust, damage, missing plating and burr; pin hole, foaming, peeling, falling off and visible scratch are not allowed to exist	Bright; without rust, damage, missing plating and burr; phenomena of peeling and falling off are not allowed to exist
8	Installation of auxiliaries		Flat and firm	
9	Guide sample ^a		The product attached guide sample has identical material with the main body of handbags and knapsacks	
^a The guide sample refers to the sample block attached by products material in order to indicate the main body material; products not attached with guide sample will not be subjected to inspection of this item.				

4.5 Physical and mechanical properties

4.5.1 Specified weight bearing

It shall meet the requirements specified in Table 4.

4.5.2 Oscillation and impact property

Carry out oscillation and impact test under specified weight bearing condition, respectively inspect shoulder straps, handles and side straps; the oscillation and impact times are: 400 times for double shoulder straps and double handles; 250 times for single shoulder straps and single handle; 150 times for side straps. After the test, the bag body shall be free

from cracking; each component shall be free from deformation, fracture, damage and split thread; various straps which take connecting action are not allowed to have above 30% deformation; fixed parts and connecting pieces shall be free from looseness; the bag lock shall be capable of being opened normally, the trick lock is free from phenomena of being stuck, skipping number, off hook, disordered number and password out of control.

Note: Double shoulder straps and double handles refer to the same components at correspondingly symmetrical position of products.

4.5.3 Other physical and mechanical properties

They shall meet the requirements specified in Table 5.

Table 4 Specified Weight Bearing

Specification/mm	Specified weight bearing/kg	
	High-class products	Qualified products
<180	2	1
180~300(Excluding 300)	5	3
300~400(Excluding 400)	7	5
400~500(Excluding 500)	9	7
≥500	12	10

Note: The specified weight bearing excludes the deadweight of bag body.

Table 5 Other Physical and Mechanical Properties

No.	Inspection item		Requirements	
			High-class products	Qualified products
1	Sewing strength		The sewing strength between shell fabrics shall not be less than 196N on an effective area of 60mm×60mm	
2	Auxiliaries		Bag lock, connector clips, magnetic fastener, etc. are capable of opening and closing normally and are without abnormality	
3	Zipper durability		Without off teeth, staggered teeth or damage after being used for 300 times	Without off teeth, staggered teeth or damage after being used for 200 times
4	Colour fastness to rubbing(staining)	Leather and reproduced leather	Dry rubbing ≥Grade 4; wet rubbing ≥Grade 3	
		Artificial leather and synthetic leather		
		Fabric		
5	Resistance to corrosion of hardware fitting		Surface without corrosion	The surface corrosion area is not larger than 1mm ²

5 Test Method

5.1 Materials and auxiliaries

Before processing and production, the inspection or verification shall be carried out according to the relevant standards and the harmful matter limit shall be inspected according

to such standards as GB 20400, GB 19340-2003, GB 21550-2008, GB/T 2912.1-1998 and GB/T 17592-2006.

5.2 Specification

Measure with a steel ruler or dedicated ruler with scale interval of 1mm, subject to the longest point at the outline of the bag body in natural state.

Note: When the parties concerned have disagreement on the specification and permissible deviation, the specification and permissible deviation shall be inspected according to the design requirements.

5.3 Appearance quality and marking

Inspect with eyes, sensing and measuring ruler under natural light.

5.4 Physical and mechanical properties

5.4.1 Oscillation and impact property

Before the test, measure the length of straps part (length of unfixed part) which takes connecting action with a straight steel ruler with scale interval of 1mm and carry out specified weight bearing according to those specified in Table4 ; Uniformly place the weight bearing object in the package, and adjust the shoulder straps to maximum length; respectively carry out test to shoulder straps, handles and side straps according to the requirements of QB/T 2922; after the test, measure the length of straps part which takes connecting action within 2min and calculate its deformation amount.

Where double shoulder straps and double handles are tested, two shoulder straps or two handles shall be simultaneously fixed to the spring hook of oscillation and impact tester of bags and suitcases.

5.4.2 Sewing strength

Cut out two portions of suture shell fabric of main position of handbag and knapsack with effective area of 60mm×60mm (the suture length is 60mm and the widths of shell fabric at both sides of suture are 60mm); the width between upper and lower clamp is 50mm and the depth is (30±2)mm; test with a tensile machine; the pulling speed is (100±10)mm/min and up to tensile failure (thread or shell fabric); take the minimum value as the result. If the displayed reading of tensile machine exceeds the specified value of sewing strength but the sample is not broken, the test may be terminated.

5.4.3 Auxiliaries

Carry out manual inspection after the test of Oscillation and impact properties, opening and closing are recorded as once. Respectively test inspection 200 times.

5.4.3.1 For mechanical trick lock, turn the cipher wheel by hand to set a password, and open and close the trick lock with the set password; arbitrarily set different digital codes and respectively open and close for 200 times. For key lock, insert the key along the lock barrel into the key slot of lock barrel to open and close the lockset. For electronic encoding lock, use electronic key to open and close the lockset.

5.4.3.2 The key lock and electronic encoding lock shall be tested for 10 times with non-dedicated keys and the mechanical trick lock shall be subjected to opening test by adopting any ten different messy codes.

5.4.3.3 Manual opening and closing of connector clips and magnetic fasteners are recorded as once and respectively test for 200 times.

5.4.4 Zipper durability

Select a zipper with length of 20cm, carry out test at the speed of 20 times/min; opening

and closing are recorded as once. Where the zipper's length is less than 20cm, carry out test in the maximum length range of zipper.

5.4.5 Color fastness to rubbing

Respectively sample from the surface and bag cover of handbag and knapsack and inspect the staining fastness. Where the front surface, rear surface and bag cover are of the same material, sample from the rear surface for testing; where front surface, rear surface and bag cover are of different materials, respectively sample for testing; where front surface and cover are of the same material, sample from the front surface or cover for testing.

Materials of leather, artificial leather, synthetic leather and reproduced leather shall be subjected to inspection according to QB/T 2537; the mass of test head is 1000g; carry out dry rubbing for 50 times and wet rubbing for 10 times; for fabric materials, take a group of samples for the inspection according to the requirements of GB/T 3920-1997.

5.4.6 Resistance to corrosion of hardware fitting

Carry out inspection according to QB/T 3826-1999, the chromium-plating piece shall be tested for 12h; the zinc coated part shall be tested for 6h.

6 Inspection Rules

6.1 Batching

One inspection batch composed of products of the same variety and specification that are put into production in the same variety of raw material and produced according to the same production process.

6.2 Delivery inspection

Each batch of products must be subjected to the appearance inspection piece by piece and shall not be delivered until being qualified.

6.3 Routine type inspection

Draw three products at random from the products qualified by delivery inspection for the routine type inspection if one of the following conditions occurs.

- a) There is significant change in product structure, technique and materials;
- b) Where the production has been suspended for half a year, and now the production is resumed;
- c) When the state quality supervision organization requires carrying out the type inspection;
- d) During the regular production, a type inspection is carried out at least once half a year.

6.4 Special type inspection

In compliance with the requirements of Appendix A.

6.5 Determination of qualification

6.5.1 Determination rule for single piece

- a) High-class products: if the harmful matter limit, appearance quality, marking and physical and mechanical properties all reach the requirements for high-class products, the products are high-class products;
- b) Qualified products: if one item is unqualified in harmful matter limit, marking and

physical and mechanical properties, the products are unqualified. If all the harmful matter limit, marking and physical and mechanical properties are qualified and the minor defects not above three items are allowed in the appearance quality, the products are qualified. If products have defects with influence on the use function of the products, the products are unqualified.

6.5.2 Batch determination rule

a) High-class products: this batch of products is high-class products if three tested products meet the requirements of high-class products;

b) Qualified products: this batch of products is qualified if all three tested specimens reach the requirements of qualified products. If one (or above) is unqualified, reinspection shall be carried out by double sampling; this batch of products is qualified if the reinspection is qualified completely.

7 Marking, Labeling, Packing, Transportation and Storage

7.1 Marking

7.1.1 The qualified products shall have the following marking:

Production organization (distribution organization) name, production organization address, trademark, grade, product certificate (or inspection marking), connection telephone; if necessary, instruction for application (maintenance) of the products shall be attached.

7.1.2 If necessary, external packing of the products shall cover product name, article number, color, number, storage (protection) marking, etc.

7.2 Labeling

Product labeling shall cover the following contents: product name, product standard number, specification (model), article number, main body material (shell fabric and lining fabric), qualified (inspection) marking, etc.

7.3 Packing

Inner and outer packing for products shall be made of appropriate packing materials, to keep the products from damage during the transportation and storage.

7.4 Transportation and storage

- Keeping from insolation, rain and snow;
- Keeping ventilative and dry, keeping away from moisture and hot environment;
- Keeping products away from chemicals and liquid erosion;
- Avoiding stabbing or scratching by sharp objects.

Appendix A

(Normative)

Special Type Inspection

A.1 Application scope

National supervision and random inspection, arbitration inspection and consumption dispute.

A.2 Requirements

The dissoluble harmful aromatic amine dye in the materials of leather, reproduced leather and fabrics shall be in accordance with those specified in Table 1 based on the routine type inspection.

A.3 Test method

A.3.1 Sampling

The sampling shall be carried out on the main positions of the products and different materials shall be sampled respectively; the samples shall be representative; the sampling conditions shall be reported in details.

A.3.2 Inspection

Different materials shall be inspected respectively, the materials of leather, reproduced leather shall be inspected according to GB/T 19942 and the fabrics materials shall be inspected according to GB/T 17592-2006.

A.4 Determination of qualification

If this inspection does not conform to the requirements specified in Table 1, the products are determined as unqualified.