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PEOPLE'S REPUBLIC OF CHINA**

GB 31892-2015

General safety specification of umbrellas

伞类产品安全通用技术条件

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Foreword

Chapter 5 of this Standard is compulsory; the others are voluntary. This Standard was drafted in accordance with the rules given in GB/T 1.1-2009. Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The institution issuing this document shall not be held responsible for identifying any or all such patent rights. This Standard was proposed by China National Light Industry Council. This Standard shall be under the jurisdiction of the National Standardization Center of Sundry Articles. The drafting organizations of this Standard. Hangzhou Paradise Umbrella Group Co., Ltd., Sun City Outdoor Products Technology Co., Ltd., Beijing 1st Institute of Quality Supervision and Inspection of Light Industrial Products, Yuzhongniao (Fujian)

Outdoor Products Co., Ltd., Jiangxi Qinde Industrial Co., Ltd., Zhejiang Hongye Umbrella Co., Ltd., Fulong (Fujian) Umbrella Co., Ltd., Zhejiang Friendship Feinuo Umbrella Co., Ltd., Shaoxing Jinding Umbrella Co., Ltd., Quanzhou Hongli Umbrella Co., Ltd., Rixin Textile Co., Ltd., Susino Umbrella Co., Ltd., Zhejiang Tianwei Umbrella Co., Ltd., Jinjiang Jialemei Umbrella Co., Ltd., Fujian Jicheng Umbrella Co., Ltd., Fujian Yusimeng Umbrella Co., Ltd., Hongtai (Fujian) Rain Gear Parts Co., Ltd., Swift (Fujian) Umbrella Co., Ltd. and Xiamen Tongan Hexin Umbrella IND. Co., Ltd. The main drafters of this Standard. Li Chuanhe, Wang Qiwei, He Lingjun, Cai Rongtuan, Ding Jingtang, Cai Jinbang, Yu Chengrong, Wang Wenbi, Lv Miaofen, Lv Xinmiao, Lv Yayan, Lv Shiliang, Wang Anbang, Pan Wei, Xiao Qingjiang, Huang Wenji, Liu Jishan, Cai Rongyong, Xu Youcan, Lu Jingxiang, Wu Hengyou, Zhou Xiaomei, Wei Xiaoying, Wang Xinyao, Cheng Xiaohu and Zhao Peng. General Safety Specification of Umbrellas

1 Application Scope

GB 31892-2015 is the Chinese national standard on general safety specification of umbrellas, in the field of domestic and commercial equipment, entertainment, sport. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 11 September 2015 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 April 2017. Classification: ICS 97.180, CCS Y89. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This Standard specified the term and definition, product classification, requirements, test method, inspection rules and marking, packaging, transportation and storage of umbrellas. This Standard applies to handheld umbrella and fixed umbrella whose umbrella cover and stand are made of different materials. This Standard does not apply to children umbrellas.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition dated applies to this document. For undated references, the latest edition of the referenced documents (including all amendments) applies to this Standard.

GB/T 2828.1-2012, Sampling procedures for inspection by attributes - Part1. Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

GB/T 2829-2002, Sampling procedures and tables for periodic inspection by attributes

(Apply to inspection of process stability)

GB/T 2912.1, Textiles - Determination of formaldehyde - Part

3 Terms and Definitions

For the purpose of this document, the following term and definition applies.

3.1 pinch point a point causing injury because of being pinched by two rigid parts

4 Classification

4.1 They can be divided in accordance with the forms of opening and closing into hand-open and hand-close umbrella, hand-open and auto-close umbrella, auto-open and hand-close and auto-open and auto-close umbrella.

4.4 Handheld umbrella can be divided into all-weather umbrella, plastic umbrella, oilcloth umbrella, paper umbrella, art umbrella and so on.

4.5 Fixed umbrella can be divided into beach umbrella, garden umbrella and so on.

5.2 Tip

5.2.1 The end face of the tip of handheld umbrella shall be spherical or cambered; the diameter of the tip shall not be less than 8 mm.

5.2.2 For the products of handheld umbrella which are made by nesting the shaft and tip, the depth of the shaft stretching into the tip shall not be less than 10 mm.

5.3 Requirements for safety in use

5.3.1 The metal wire head shall not be exposed; there shall be no sharp end or sharp edge which can be touched in use and cause injuries to human body.

5.3.2 No pinch point shall be generated in normal use.

5.3.3 The positioning device for opening and closing umbrella is reliable which shall not be out of control; during the test process specified in 6.3.3, the auto-open and handheld umbrella and the auto-open and auto-close umbrella will not be open if the button is not pressed.

5.5 Limit of hazardous substances

5.5.1 Hazardous elements in handle The soluble antimony, arsenic, barium, cadmium, chromium, mercury, selenium or any soluble chemical compound formed by these elements shall not exceed the numerical values specified in Table 1.

5.5.2 Migratable lead content of the cover of oilcloth umbrella and paper umbrella The

migratable lead content of the cover of oilcloth umbrella and paper umbrella shall not be greater than 90 mg/kg.

5.6 Ultraviolet protection of the cover For the products with the ultraviolet protection, the UPF shall be greater than 40 and the T (UVA)AV less than 5%.

5.7 Wind resistance strength For beach umbrella, garden umbrella, all-weather umbrella and oilcloth umbrella, no defect which will cause human injuries shall occur in the rib or rod after the test specified in 6.7.

6.2 Tip

6.2.1 Carry out visual inspection for the end face of the tip of handheld umbrella; use a Vernier calliper with the minimum division value

0.02 mm to measure the diameter of the tip directly.

6.3 Requirements for safety in use

6.3.1 Carry out visual inspection and hand-feeling inspection.

6.3.2 Carry out visual inspection and hand-feeling inspection during the opening and closing process to examine whether there is any pinch point.

6.3.3 Grip the handle to rotate for 3 times to and fro; open and close umbrella for 5 times; and observe whether it is out of control.

6.4 Parts binding fastness Beach umbrella and garden umbrella shall be tested in accordance with GB/T 23103- 2008.All-weather umbrella and plastic umbrella shall be tested in accordance with GB/T 23147-2008.Art umbrella shall be tested in accordance with QB/T 4151-2010.

6.5 Limit of hazardous substances

6.5.1 Hazardous elements shall be tested in accordance with GB 6675.4-2014.

6.5.2 Migratable lead content shall be tested in accordance with GB 6675.4-2014.

6.5.3 Formaldehyde content shall be tested in accordance with GB/T 2912.1.

6.5.4 Decomposable hazardous aromatic amine shall be tested in accordance with GB/T 17592.

6.6 Ultraviolet protection of the cover It shall be tested and evaluated in accordance with GB/T 18830.

7.1 Exit-factory inspection

7.1.1 Any product to be delivered shall pass exit-factory inspection. The product can only be