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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 12415-2015

Replacing GB/T 12415-1990

Pharmaceutical glass containers glassware stress examination methods

药用玻璃容器内应力检验方法

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Standardization Administration of China

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 12415-1990 "within pharmaceutical glass container stress test methods." This standard compared with GB/T 12415-1990, the main technical changes are as follows:

2 Terms and Definitions";

--- Increased "3 principles";

1 Scope

GB/T 12415-2015 is the Chinese national standard on pharmaceutical glass containers glassware stress examination methods, in the field of glass and ceramics industries. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 31 December 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 July 2016. Classification: ICS 81.040.01, CCS N64. 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 specifies the sample preparation stress tests within the pharmaceutical glass containers, equipment requirements, test methods, calculation methods and report Tolerance and so on. This standard applies to glass containers in the pharmaceutical stress test.

2 Terms and definitions

The following terms and definitions apply to this document.

2.1 Polarizing plate polarizer Polarizer An optical device, through which natural light after a

certain vibration direction into the plane of polarized light, and the light source being positioned generally measured Between samples.

2.2 Check polarizing analyzer The analyzer Analysis mirror An optical device, through which natural light after a certain vibration direction into the plane of polarized light, with the viewer being positioned generally be Between the test sample. Principle 3

3.1 usually glass isotropic homogeneous material, when stress is present, it will show anisotropy, birefringence phenomenon of light, bis Refractive optical path difference between the S and the stress of a relationship. DeltaS = Ksigma x d (1) Where. DeltaS

--- birefringent optical path difference; Stress optical constant K

--- glass, 10-6mm2/N; sigma

--- perpendicular to the direction of light propagation two principal stress difference in units of cattle per millimeter (N/mm); The total thickness d

--- light through glass samples measured at the site, in millimeters (mm).

3.2 stresses the same variety of glass optical constant K is the same, so you can use the optical path difference per unit thickness value indicates the size of the stress.

3.3 standard polarizing strain gauge measuring the optical path difference, and the unit thickness of the optical path difference values \u200b\u200bto represent the size of the internal stress.

4 sample preparation

4.1 specimens should be tested without the other products.

4.2 The specimen shall be placed in advance in the laboratory for more than 30min.

5 Instrument Requirements" increased "

5.6 polarizing strain gauge measurement accuracy. birefringent optical path difference is less than or equal to 3nm". Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents. The standard proposed by China National Light Industry Council. This standard by National Instrument Standardization Technical Committee on Glass (SAC/TC178) centralized. This standard was drafted. Glass National Light Industry Product Quality Supervision and Inspection Center. The main drafters of this standard. Yang Jianxin, Yuan Chunmei, Liang Ye. This standard replaces the standards previously issued as follows:

--- GB/T 12415-1990. Medicinal glass container stress testing methods