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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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Germicidal UV-C irradiation products safety guidelines

杀菌用UV-C辐射产品安全指南

(English Translation)

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Foreword

This document is a report-type guidance technical document.

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document modifies and adopts IEC PAS 63313:2021 "Position Statement on UV-C Irradiation for Germicidal Purification - Guidelines for UV-C Safety", document type.

The standard has been changed from a publicly available IEC specification to a national standardization guiding technical document of my country.

This document has undergone the following structural adjustments compared to IEC PAS63313:2021.

- Chapter 1 of IEC PAS63313:2021 has been deleted;
- Chapter 1 corresponds to Chapter 2 of IEC PAS 63313:2021;
- Added Chapter 2, Normative References;
- Chapter 3 corresponds to Chapter 7 of IEC PAS 63313:2021;
- Chapter 4 corresponds to Chapter 3 of IEC PAS 63313:2021;
- Chapter 5 corresponds to Chapter 4 of IEC PAS 63313:2021;
- Chapter 6 corresponds to Chapter 5 of IEC PAS 63313:2021;

---Chapter 6 of IEC PAS63313:2021 has been deleted;

---Appendix A corresponds to Appendix B of IEC PAS 63313:2021;

---Appendix A of IEC PAS63313:2021 has been deleted.

The technical differences between this document and IEC PAS63313:2021, and the reasons therefor, are as follows.

---The scope has been expanded with a statement of usage limits (see Chapter 1) to suit my country's national conditions;

---The normative reference GB/T 21092 [see 6.1a)] has been added to adapt to my country's national conditions;

---Table 3, "Other alternative ozone exposure level limits" (see Chapter 4 of IEC PAS 63313:2021), has been deleted to accommodate...

my country's national conditions;

The terms "enclosed enclosure," "controlled area," "irradiance (at a point on the surface)," "partially open enclosure," and "personal protective equipment" have been removed.

"Human presence detection system" and "time protection" (see Chapter 7 of IEC PAS 63313:2021) are needed to adapt to my country's national conditions.

The following editorial changes have been made to this document.

---To align with existing standards, the standard's name has been changed to "Safety Guidelines for UV-C Radiation Products for Sterilization";

---The pending sections in Chapters 3 and 4 have been deleted;

---Adjust the wording of the suspended section in Chapter 5 and move it to the end of section 6.2;

---References have been added.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Lighting Appliances (SAC/TC224).

1 Scope

This document provides guidance on radiation safety, ozone safety, and labeling for UV-C radiation products used for sterilization.

This document applies to UV-C light sources and UV-C products with an emission wavelength range of 180nm to 280nm.

This document is not applicable to.

---Equipment for which UV-C irradiation safety standards have already been published, such as GB/T 4706.120 and GB/T 4706.45;

---Application environment of UV-C equipment;

---Products that combine UV-C radiation with chemicals and additives;

---Products that do not emit UV-C radiation, such as products that emit UV-A, UV-B, or near-UV radiation;

---Requirements for performance and functional characteristics;

---Requirements to prevent material degradation and damage.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential clauses of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 21092 Miscellaneous Lamps

3 Terms and Definitions

The following terms and definitions apply to this document.

professional skilled person A person with relevant education or experience who is able to identify dangers and take appropriate action to reduce injury to themselves and others.

risk.

containment safety guard the protection provided by the cabinet or control area is not a physical component of the UV-C equipment and prevents it from being operated during UV-C equipment operation.

Physical contact, or preventing the operation of the UV-C device during physical contact.

Equipment Safety Guard Enclosed enclosures, partially open enclosures, and/or human presence detection systems.

Note: refers to the physical components of the equipment.