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

GB/T 11417.1-2025

Replacing GB/T 11417.1-2012

**Ophthalmic optics - Contact lenses - Part 1: Vocabulary,
classification and recommendations for labelling specifications**

眼科光学 接触镜 第1部分：词汇、分类和推荐的标识规范

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

GB (T) 11417 "Ophthalmic optics contact lenses", GB/T 28538 "Ophthalmic optics contact lenses and contact lens care products rabbit eye GB/T 28539 "Determination of uptake and

release of preservatives in ophthalmic contact lenses and contact lens care products"
Together they constitute the national standard for contact lenses.

This document is Part 1 of GB (T) 11417 "Contact lenses in ophthalmic optics". GB (T) 11417 has been published in the following parts.

- Part 1: Vocabulary, classification and recommended identification specifications;
- Part 2: Hard contact lenses;
- Part 3: Soft contact lenses;
- Part 4: Standard salt solution for testing;
- Part 5: Test methods for optical properties;
- Part 6: Mechanical properties test methods;
- Part 7: Test methods for physical and chemical properties;
- Part 8: Determination of validity period;
- Part 9: UV and visible light radiation ageing test (in vitro method).

This document replaces GB/T 11417.1-2012 "Ophthalmic optics contact lenses Part 1: Vocabulary, classification and recommended labeling specifications".

Compared with GB/T 11417.1-2012, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Changed the terms "scleral contact lens", "hard contact lens", "rigid gas permeable contact lens", "soft contact lens", "composite contact lens" in "basic terminology".

Contact lenses, multifocal contact lenses, and progressive focus contact lenses (see 3.1.1.3, 3.1.1.7~3.1.1.9, 3.1.1.11, 3.1.1.15, 3.1.1.16, 2012 edition, 2.1.1.3, 2.1.1.7-2.1.1.9, 2.1.1.11, 2.1.1.14, and 2.1.1.15);

--- Added "monofocal contact lens", "spherical aberration", "contact lens accessories", "suction rod", "contact lens container", "balance" in the "basic terminology" (see 3.1.1.13, 3.1.1.17~3.1.1.21);

--- Added "diopter", "front vertex", "paraxial front vertex power", and "paraxial back vertex power" to the "contact lens parameters and design-related terms" "Cylinder power", "cylindrical axis", "prismatic error", "power profile", "prescription optical prismatic power", "prismatic axis", "conic section", "conic Surface", "eccentricity", "oblate", "prolate", "ellipse", "hyperbola", "posterior optical zone", "equivalent posterior curvature radius", "critical thickness" (see 3.1.2.1.1~3.1.2.1.4, 3.1.2.1.7~3.1.2.1.12, 3.1.2.1.21~3.1.2.1.27, 3.1.2.2.1, 3.1.2.2.2, 3.1.2.4.2);

--- Changed the terms "front vertex power of label", "back vertex power of label", "peripheral

area", "contact lens" in "contact lens parameters and design related terms" Mirror axis", "circumferential contact lens", "cut edge", "center thickness", "axial edge thickness" (see 3.1.2.1.5, 3.1.2.1.6, 3.1.2.1.18, 2.1.2.1.12, 2.1.2.1.34, 2.1.2.1.43, 2.1.2.4.1, 2.1.2.4.5);

--- Deleted the terms and definitions of "spherical surface" and "thickness" in "Contact lens parameters and design-related terms" (see the 2012 edition of 2.1.2.1.23, 2.1.2.4);

--- Changed the "additional power" in the "terms related to bifocal and multifocal contact lenses" (see 3.1.4.1, 2.1.4.1 of the 2012 edition);

--- Added "scleral lens height" in "terms related to scleral contact lenses and eye lenses" (see 3.1.5.14);

--- Added "tensile modulus", "refractive index", "osmotic pressure" and "conductivity" in the "terms related to contact lens material properties" (see 3.1.6.1, 3.1.6.3, 3.1.6.5, 3.1.6.6);

--- Changed the terms "gas permeability coefficient", "oxygen permeability coefficient", "oxygen permeability", "water content", "high water content contact lens" in the "terms related to contact lens material properties" Touch mirror", "ion type", "spectral transmittance", "light transmittance", "ultraviolet A section", "ultraviolet absorption type 1", "ultraviolet absorption type 2" (see 3.1.6.4, 3.1.6.7, 3.1.6.9, 3.1.6.10, 3.1.6.10.2, 3.1.6.11~3.1.6.13, 3.1.6.14.1, 3.1.6.14.3, 3.1.6.14.4, 2012 edition 2.1.6.2, 2.1.6.3, 2.1.6.5, 2.1.6.6, 2.1.6.6.3, 2.1.6.7, 2.1.6.9, 2.1.6.10, 2.1.6.11.1,

--- Deleted the terms and definitions of "medium water content contact lens" and "non-ionic" in the "terms related to contact lens material properties" (see 2012 Version 2.1.6.6.2, 2.1.6.8);

--- Changed the "Molded contact lens" in the "Terms related to contact lens manufacturing" (see 3.1.8.3, 2.1.8.3 of the 2012 edition);

--- Added "Terms related to contact lens packaging and labeling" (see 3.1.9);

--- Added "elastic wearing" and "orthokeratology contact lenses" in the "terms related to contact lens use and wearing methods" (see 3.1.10.4.3, 3.1.10.4.4);

--- Added "Terms related to contact lens hygiene treatment" (see 3.1.11);

--- Added "inter-laboratory reproducibility" and "V-meter" in "other terms" (see 3.1.12.8.2, 3.1.12.12);

--- Changed "Classification of contact lens materials" (see Chapter 4, Chapter 3 of the 2012 edition).

This document is modified to adopt ISO 18369-1:2017 "Ophthalmic optics - Contact lenses - Part 1: Vocabulary, classification system and recommended identification" specification".

The technical differences between this document and ISO 18369-1:2017 and the reasons for them are as follows.

- Changed the "Scope" (see Chapter 1) to make its provisions clearer;
 - Changed the "scleral contact lens" and "hydrogel contact lens" in the "basic terminology" (see 3.1.1.3, 3.1.1.10, ISO 18369-1:2017 3.1.1.3 and 3.1.1.10) to make the provisions clearer;
 - Added "monofocal contact lens" in "basic terms" (see 3.1.1.13) to make the provisions clearer;
 - Deleted "contact lens care products" in "basic terms" (see 3.1.1.18 of ISO 18369-1:2017) to adapt to my country's Technical conditions, increase operability;
 - Changed the "Paraxial Anterior Vertex Power", "Paraxial Posterior Vertex Power" and "Label Anterior Vertex Power" in the "Contact Lens Parameters and Design-Related Terms" "Label back vertex power" and "back optical zone curvature radius" (see 3.1.2.1.3~3.1.2.1.6, 3.1.2.2.3, ISO 18369-1:2017) 3.1.2.1.3~3.1.2.1.6, 3.1.2.2.3) to make the provisions clearer;
 - Changed the terms "osmotic pressure", "oxygen permeability coefficient", "oxygen permeability" and "water content" in the "terms related to contact lens material properties" (see 3.1.6.5, 3.1.6.7, 3.1.6.9, 3.1.6.10, 3.1.6.5, 3.1.6.6, 3.1.6.8, 3.1.6.10, 3.1.6.11 of ISO 18369-1:2017) its provisions are clearer;
 - Added "light transmittance" in the "terms related to contact lens material properties" (see 3.1.6.13) to make its provisions clearer;
 - Deleted "multiple-measurement solution", "single-measurement solution" and "tamper-evident packaging" in "terms related to contact lens packaging and labeling" (see 3.1.9.3, 3.1.9.4, and 3.1.9.6 of ISO 18369-1:2017) to adapt to my country's technical conditions and increase operability;
 - Deleted "active ingredient", "antimicrobial activity", "antimicrobial agent" and "neutralization" from the "terms related to contact lens hygiene" "Neutralizer", "Surfactant", "Standard", "Sanitization", "Contact Lens Cleaning", "Contact Lens Care Procedure", "Contact Lens Disinfection", "Contact Lens Removal" Contact lens disinfectant ingredients, contact lens disinfectant care products, contact lens system disinfectant care products, rubbing cleansing fluids, and enzyme cleaners "Rinse", "soak", "conditioning solution", "wetting solution", "eye drops", "multi-purpose solution" (see 3.1.11.1~ of ISO 18369-1:2017) 3.1.11.6, 3.1.11.8, 3.1.11.12~3.1.11.19, 3.1.11.21~3.1.11.24), to adapt to my country's technical conditions, increase operability;
 - Deleted "inoculum" in "other terms" (see 3.1.12.7 of ISO 18369-1:2017) to adapt to my country's technical conditions.
- Increased operability;
- Changed the "Classification of contact lens materials" (see Chapter 4, Chapter 4 of ISO