

ICS 31.260
CCS L 90



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

GB/T 44567-2024

Optics crystal-Ultraviolet grade calcium fluoride crystal

光学晶体 紫外级氟化钙晶体

Issued on: September 29, 2024

Implemented on: April 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

3.1

3.2 Optical homogeneity

3.3

3.4 Stress birefringence

3.5 Stripes

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.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document was prepared by the National Technical Committee on Optics and Photonics Standardization (SAC/TC103) and the National Technical Committee on Intraocular Lenses Standardization (SAC/TC461) jointly managed.

This document was drafted by: Shanghai Institute of Silicates, Chinese Academy of Sciences, Shanghai Desi Kaifu Optoelectronics Technology Co., Ltd., Beijing Glass Research Institute Institute Co., Ltd., Shanghai Microelectronics Equipment (Group) Co., Ltd., Shanghai Leiwang Optical Technology Co., Ltd., Beijing Sinoma Artificial Crystal Research Institute Research Institute Co., Ltd., China Ordnance Industry Standardization Institute, and Fujian Jingxiang Optoelectronics Technology Co., Ltd.

The main drafters of this document are: Su Liangbi, Zhang Bo, Liu Rongrong, Wu Qinghui, Tang Fei, Zhang Zhonghan, Jiang Dapeng, Wang Jingya, Kou Huamin, Qian Xiaobo, Jia Jian, Liu Shan, Hou Baolu, Li Yunfeng, Zeng Aijun, Chen Jianrong, Meng Fanping, Lai Jinfeng.

Optical Crystal UV Grade Calcium Fluoride Crystal

1 Scope

This document specifies the technical requirements, inspection rules, marking, packaging, transportation, storage and accompanying documents of UV grade calcium fluoride crystals. Corresponding test methods.

This document applies to the production and inspection of UV grade calcium fluoride crystals.

2 Normative references

GB/T 7962.1

GB/T 7962.2

GB/T 7962.5

GB/T 7962.16

GB/T 7962.20

GB/T 16534

GB/T 22588

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

The applied wavelength is 190nm~400nm calcium fluoride crystal.

3.2 Optical homogeneity

The degree of consistency of the refractive index at each point inside the crystal in the same direction.

3.3

The derivative of a medium's refractive index as a function of wavelength.

3.4 Stress birefringence

Birefringence is caused by stress within the crystal.

3.5 Stripes

Ice crack-like stripe defects inside calcium fluoride crystal.