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Optics and photonics — Optical materials and components — Specification of chalcogenide glass used in the infrared spectrum

Optique et photonique — Matériaux et composants optiques — Spécification des verres de chalcogénure utilisés dans le spectre infrarouge

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Foreword

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This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 3, *Optical materials and components*.

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Introduction

This document applies to the specification of the chalcogenide glass used in the infrared spectrum. The chalcogenide glass described in this document is transparent in the infrared region.

The chalcogenide glass has a wide range of transparency from the visible to the infrared wavelength region. This depends on the chalcogenide chemical composition. The optical properties of chalcogenide glass can provide flexibility and further capability for IR optical system.

Nowadays, the chalcogenide glass is used as a substitute material for traditional infrared materials like germanium, silicon or zinc selenide. The market for chalcogenide glasses is rapidly expanding. However, this new material is sometimes distributed without specifying its properties and qualities, which can confuse users. In consideration of the rapid increasing of market for infrared application, the definition and standardization of the chalcogenide glass for infrared optics are necessary.