

Third edition
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Raw optical glass — Resistance to attack by aqueous acidic solutions — Test method and classification

*Verre d'optique brut — Résistance à l'attaque par des solutions acides
aqueuses — Méthode d'essai et classification*



Reference number
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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*.

This third edition cancels and replaces the second edition (ISO 8424:1996), which has been technically revised.

The main changes are as follows:

- a new measurement procedure, the powder method, was added;
- [Annex A](#) was added;
- [Annex B](#) was added;
- the surface method is technically revised.

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Introduction

This document specifies methods for testing the resistance of optical glasses to the attack by aqueous acidic solutions and provides corresponding classifications according to the resistance determined.

Two different methods are provided: A surface method and a powder method. Both methods are described side by side so that the user can select a suitable or convenient method for the application.

The surface method is applied to polished glass samples. The results are comparable to application conditions.

The powder method uses small amounts of crushed granular glass for testing. It is easy to apply, and provides test results quickly.

The acid resistance classes determined by the two different methods show a correlation, but they cannot be converted into each other unambiguously. Therefore, different notations are introduced for the acid resistance classes referring to the determining method to avoid misunderstandings.