
Textile glass — Determination of combustible-matter content

Verre textile — Détermination de la teneur en matières combustibles



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Contents

Page

Foreword.....	iv
1 Scope.....	1
2 Terms and definitions.....	1
3 Principle.....	1
4 Apparatus.....	1
5 Test specimens.....	2
5.1 Selection of test specimens.....	2
5.2 Number of test specimens.....	3
6 Procedure.....	3
6.1 Precautions to be taken during test.....	3
6.2 Weighing the specimen holder.....	3
6.3 Weighing the dried test specimen plus holder.....	4
6.4 Weighing the calcinated test specimen plus holder.....	4
7 Expression of results.....	5
8 Precision.....	5
9 Test report.....	5

Foreword

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 13, *Composites and reinforcement fibres*.

This fourth edition cancels and replaces the third edition (ISO 1887:1995), which has been technically revised.

Textile glass — Determination of combustible-matter content

1 Scope

This International Standard specifies a method for the determination of the combustible-matter content of products made from textile glass, such as continuous-filament yarns, staple-fibre yarns, rovings, chopped strands, milled fibres, fabrics, chopped-strand and continuous-filament mats, and other glass reinforcements.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

combustible-matter content

ratio of the mass of material removed on calcination from a dried textile glass product to the mass of the dried product

Note 1 to entry: This ratio is expressed as a percentage in this International Standard. It is equal to the content of size or finish on the textile glass product when the size or finish is completely combustible without significant residue (i.e. primarily organic products).

3 Principle

Test specimens, dried under prescribed conditions, are weighed before and after calcination at a temperature of $625\text{ °C} \pm 20\text{ °C}$ or, with types of glass which are unstable at this temperature, at a temperature between 500 °C and 600 °C , also kept constant to within 20 °C .

4 Apparatus

4.1 Air-circulation oven, for drying specimens, capable of being maintained at $105\text{ °C} \pm 5\text{ °C}$ or the chosen drying temperature and maintained to within $\pm 5\text{ °C}$ (see 6.3).

4.2 Muffle furnace, capable of being maintained, with a tolerance of $\pm 20\text{ °C}$, at any desired temperature up to 625 °C , the temperature being measured at the centre of the muffle furnace with the door closed.

4.3 Desiccator, containing a suitable desiccant, for example silica gel, calcium chloride, phosphorous(V) oxide.

4.4 Specimen holder, made from a material stable at the test temperature, allowing the best possible air circulation around the test specimen and designed to prevent loss of material. The holder may be a porcelain crucible, a basket made of stainless-steel gauze, etc.

4.5 Stainless-steel tongs, for handling test specimens and holders.

4.6 Balance, accurate to 0,1 mg.

4.7 Polished-metal templates, for the preparation of test specimens.