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European foreword

This document (EN 17978:2024) has been prepared by Technical Committee CEN/TC 164 “Water Supply”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Introduction

In respect of potential adverse effects on the quality of swimming pool water and water intended for human consumption, caused by the products covered by this document:

a) this document provides no information as to whether the products may be used without restrictions in any of the Member States of the EU or EFTA;

b) while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of these products remain in force.

NOTE Conformity with this document does not confer or imply acceptance or approval of the products in any of the Member States of the EU or EFTA. The use of the products covered by this document is subject to regulation or control by National Authorities.

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1 Scope

This document is applicable to glass beads and glass granulate intended for treatment of water for human consumption, swimming pool and/or spa water. It solely describes the characteristics of glass beads and glass granulate and specifies the requirements and the corresponding test methods for glass beads and glass granulate.

General information on glass beads and glass granulate and general rules relating to safety is provided in Annex A.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12901, *Products used for treatment of water intended for human consumption - Inorganic supporting and filtering materials - Definitions*

EN 12902, *Products used for treatment of water intended for human consumption - Inorganic supporting and filtering materials - Methods of test*

EN ISO 12677, *Chemical analysis of refractory products by X-ray fluorescence (XRF) - Fused cast-bead method (ISO 12677)*

ISO 13322-2, *Particle size analysis — Image analysis methods — Part 2: Dynamic image analysis methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12901 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— IEC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp/

3.1
glass granulate
granulated filter material made of glass free from any other extraneous matter

3.2
glass beads
round (spherical) filter material made of glass free from any other extraneous matter

4 Description

4.1 Identification

4.1.1 Chemical name

Glass beads and glass granulate predominantly consist of amorphous silicon dioxide ($Si0_2$).

More detailed information on the composition of filter materials made from glass is found in Table 1 and in Table A.1.

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