

საქართველოს სტანდარტი

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GRP ავზები და ჭურჭელი მიწის ზედაპირზე გამოსაყენებლად - ნაწილი 1:
ნედლეული - სპეციფიკაცია და მიღების კრიტერიუმი

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GRP tanks and vessels for use above ground - Part 1: Raw materials - Specification conditions and acceptance criteria

Réservoirs et récipients en PRV pour applications hors sol - Partie 1 : Matières premières - Conditions de spécification et critères d'acceptation

Oberirdische GFK-Tanks und -Behälter - Teil 1: Ausgangsmaterialien - Spezifikations- und Abnahmeverbedingungen

This European Standard was approved by CEN on 25 July 2021.

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European foreword

This document (EN 13121-1:2021) has been prepared by Technical Committee CEN/TC 210 “GRP tanks and vessels”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by March 2022, and conflicting national standards shall be withdrawn at the latest by March 2022.

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.

This document supersedes EN 13121-1:2003.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

EN 13121 consists of the following parts under the general title "GRP tanks and vessels for use above ground":

- *Part 1 — Raw materials – Specification conditions and acceptance criteria*
- *Part 2 — Composite materials – Chemical resistance*
- *Part 3 — Design and workmanship*
- *Part 4 — Delivery, installation and maintenance*

These four Parts together define the responsibilities of the tank or vessel manufacturers, the materials manufacturers or suppliers and the purchasers.

The design and manufacture of GRP tanks and vessels involve a number of different materials such as resins, plastics and reinforcing fibres and a number of different manufacturing methods. It is implicit that tanks and vessels conforming to this document should be made only by manufacturers and operators who are competent and suitably equipped to fulfil all requirements, using materials manufactured by competent and experienced material manufacturers.

Part 1 of this series specifies the requirements for specification conditions and acceptance conditions for raw materials — resins, curing agents, thermoplastic linings, reinforcing materials and additives — in terms of both material technical properties and the manufacturing process. These requirements are necessary in order to establish the chemical resistance properties determined in Part 2 and the mechanical, thermal and design properties determined in Part 3. Together with the workmanship principles determined in Part 3, specification conditions and acceptance conditions for raw materials ensure that the tank or vessel will be able to meet its design requirements, particularly in terms of its chemical/thermal resistance and pressure and load supporting requirements. Part 4 of this series specifies requirements for delivery, handling and installation and recommendations for maintenance of GRP tanks and vessels.