



# Master the changes in EN 12983-1:2023

We guide you through the new requirements for domestic cookware for use on top of a stove, cooker or hob.

The [EN 12983:2023](#) standard introduces significant changes to the construction and performance requirements for household goods. Understanding these changes, as well as the tests involved in compliance, is crucial for manufacturers and retailers to ensure compliance, maintain product

quality, and meet consumer expectations. They must adhere to the applicable regulations to enter the European markets. In this document we point out the most important changes to EN 12983-1 and EN 12983-2 published in February 2023.

**Part 1 - General Requirements** specifies safety and performance requirements for cookware used on stoves, cookers, or hobs. It applies to all types of cookware, regardless of material or manufacturing method, including those intended for use both „on top“ and „in oven.“

**Part 2 - General Requirements for Ceramic Cookware and Glass Lid** outlines safety and performance requirements for ceramic and glass ceramic cookware designed for use on stoves, cookers, or hobs but also envisages that the cooking can be completed in an oven. The latest versions, supersede the former standards, including EN 12983-1:2000/AC:2008, EN 12983-1:2000/A1:2004, and EN 12983-1:2000.

They are expected to be officially recognized as national standards no later than August 2023. This recognition can be achieved either through the publication of an identical text or by endorsement. To ensure consistency, any conflicting national standards will be withdrawn by August 31, 2023 at the latest. After that date it is possible to declare to be at "state of the art" for safety and performances only when the product complies with the 2023 revisions of the standards.

#### NEW REQUIREMENTS ON COOKWARE

The changes in the EN12983:2023 standard have significant implications for product design and quality assurance, because we see a revision of requirements and associated tests. Here we just summarized the most important.

##### 1. Scope:

- The EN 12983:2023 covers all cookware regardless of material or method of manufacture. It is also applicable to cookware intended for use both "on top" and "in oven". In the former standards glass, ceramic and glass ceramic articles were excluded.
- The former versions of EN 12983 referred to ISO 2409:1994. Now the standard refers to ISO 2409:2020
- The former versions of EN 12983 referred to ISO 2742/2744. Now the standard refers to EN ISO 28706-1/28706-2

- Additional references: The new version EN 12983:2023 also refers to EN 60350-2 and EN ISO 4628-2
- Removed references: The new version EN 12983:2023 is no more referring to EN 2536:1995

##### 2. Coating:

- Introduction of „scraping“ tests to assess non-stick coating performance by cooking real pancakes. This test involves 5 cycles of scraping and cooking, recording the behaviors.
- Corrosion testing, derived from former EN 12983-2, checks for corrosion after repeated contact with a standard „sauce“ interspersed with 500 cycles of bottom abrasion.
- Citric acid test at room temperature, clause 8.1.1. When the interior enamel coat is tested in accordance with EN ISO 28706-2:2017, Clause 11, the maximum acceptable weight loss shall be 5,0 g/m<sup>2</sup> for the liquid phase and 10,0 g/m<sup>2</sup> for the vapor phase. The interior coating shall be tested in accordance with EN ISO 28706-1. For matte and glossy surfaces, the result is considered as successful if the sample is in class AA, A+.
- Boiling water test, clause 8.1.2. When the interior enamel coat is tested in accordance with EN ISO 28706-2:2017, Clause 14, the maximum acceptable weight loss shall be 1,5 g/m<sup>2</sup> for the liquid phase and 4,5 g/m<sup>2</sup> for the vapor.



##### 3. Heat Distribution (Performance):

- The standard now includes specific requirements for heat distribution to ensure optimal cooking performance. The point which first reaches a temperature of 190 °C shall not exceed a temperature of 290°C when the minimum temperature over the entire interior base reaches 190 °C.

#### 4. Functionality with Different Heat Systems:

Cookware must demonstrate functionality across different heat systems, such as induction, gas, and electric hobs. Additionally, the bottom concavity should be less than 0.1% of the diameter when claimed to be used with electric solid plate heating systems.

#### 5. CEN/TS 12983-2:2005 Inclusion

The requirements described in CEN/TS 12983-2:2005 are included in EN 12983:2023, except the ones for ceramic.

#### BENEFIT FROM THE KNOWLEDGE OF AN EXPERIENCED PARTNER

Adhering to the updated requirements will ensure compliance, maintain product quality, and reduce liability risks. By partnering with us, you can enjoy the following advantages:

- Build customer trust through testing and certification by an independent third party.
- Access testing and certification services for all European markets, streamlining your market entry process.

- Gain the knowledge necessary to navigate the new standard, mitigate compliance risks, and seize a competitive advantage in the market.
- Reduce liability risks by complying with documented safety standards. We also provide well-founded advice on optimizing your products according to recognized standards and consumer expectations.

#### TAKE THE NEXT STEP

There is so much more to discover. We are offering a bundle of services tailor-made for manufacturers and retailers of cookware. [On our website you can find the full scope.](#) Our experts test your domestic cookware according to criteria such as mechanical safety, usage properties, workmanship, harmlessness to health and hygienic aspects. At the end, you can prove product quality and safety not only with the appropriate testing, but also highlight your brand with a globally recognized test mark.

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