

DIN EN ISO 4531



ICS 25.220.50; 67.250; 97.040.60

Supersedes
DIN ISO 4531-2:2015-07

**Vitreous and porcelain enamels –
Release from enamelled articles in contact with food –
Methods of test and limits (ISO 4531:2018);
English version EN ISO 4531:2018,
English translation of DIN EN ISO 4531:2018-12**

Emails –

Freisetzung aus emaillierten Gegenständen für den Kontakt mit Lebensmitteln –
Prüfverfahren und zulässige Grenzwerte (ISO 4531:2018);
Englische Fassung EN ISO 4531:2018,
Englische Übersetzung von DIN EN ISO 4531:2018-12

Émaux vitrifiés –

Libération depuis les articles émaillés en contact avec les aliments –
Méthode d'essai et limites (ISO 4531:2018);
Version anglaise EN ISO 4531:2018,
Traduction anglaise de DIN EN ISO 4531:2018-12

Document comprises 18 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

National foreword

This document (EN ISO 4531:2018) has been prepared by Technical Committee ISO/TC 107 “Metallic and other inorganic coatings” in collaboration with Technical Committee CEN/TC 262 “Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys” (Secretariat: BSI, United Kingdom).

The responsible German body involved in its preparation was *DIN-Normenausschuss Materialprüfung* (DIN Standards Committee Materials Testing), Working Committee NA 062-01-63 AA “Testing of vitreous and porcelain enamels”.

The DIN documents corresponding to the international documents referred to in this document are as follows:

ISO 648	DIN EN ISO 648
ISO 1042	DIN EN ISO 1042
ISO 3585	DIN ISO 3585
ISO 3696	DIN ISO 3696
ISO 4788	DIN EN ISO 4788
ISO 28764	DIN EN ISO 28764

Amendments

This standard differs from DIN ISO 4531-2:2015-07 as follows:

- a) ISO 4531-1 and ISO 4531-2 have been merged;
- b) the standard has been renamed;
- c) 12 additional elements have been added, which are to be tested in addition to cadmium and lead, and 4 additional elements have been added, which shall not be included;
- d) a high-temperature test has been introduced for cooking and frying utensils;
- e) a new test method for the release test including a new test apparatus has been added;
- f) Annex A “Explanatory information on release limits” has been added.

Previous editions

DIN 51032: 1977-12, 1986-02
DIN ISO 4531-2: 2015-07

National Annex NA
(informative)

Bibliography

DIN EN ISO 648, *Laboratory glassware — Single-volume pipettes*

DIN EN ISO 1042, *Laboratory glassware — One-mark volumetric flasks*

DIN EN ISO 4788, *Laboratory glassware — Graduated measuring cylinders*

DIN EN ISO 28764, *Vitreous and porcelain enamels — Production of specimens for testing enamels on sheet steel, sheet aluminium and cast iron*

DIN ISO 3585, *Borosilicate glass 3.3 — Properties*

DIN ISO 3696, *Water for analytical laboratory use — Specification and test methods*