

DIN EN 71-12



ICS 97.200.50

Supersedes
DIN EN 71-12:2013-07

**Safety of toys –
Part 12: N-Nitrosamines and N-nitrosatable substances;
English version EN 71-12:2016,
English translation of DIN EN 71-12:2017-03**

Sicherheit von Spielzeug –
Teil 12: N-Nitrosamine und N-nitrosierbare Stoffe;
Englische Fassung EN 71-12:2016,
Englische Übersetzung von DIN EN 71-12:2017-03

Sécurité des jouets –
Partie 12: N-nitrosamines et substances N-nitrosables;
Version anglaise EN 71-12:2016,
Traduction anglaise de DIN EN 71-12:2017-03

Document comprises 35 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.

Start of application

The start of application of this standard is 2017-03-01.

National foreword

This standard includes safety requirements.

This document (EN 71-12:2017) has been prepared by Technical Committee CEN/TC 52 “Safety of toys” (Secretariat: DS, Denmark).

The responsible German body involved in its preparation was *DIN-Normenausschuss Sicherheitstechnische Grundsätze* (DIN Standards Committee Safety Design Principles), Working Committee NA 095-05-01-02 AK *Sicherheit von Spielzeug – Chemische Eigenschaften*.

The DIN Standard corresponding to the International Standard referred to in this document is as follows:

ISO 29941 DIN ISO 29941

Amendments

This standard differs from DIN EN 71-12:2013-07 as follows:

- a) the introduction has been deleted and the warning notice which had been in the introduction has been transferred to 6.2;
- b) a note stating that with regard to elastomers, up to now N-nitrosamines and N-nitrosatable substances have mainly been detected in vulcanized materials has been added;
- c) the definition of elastomer (3.2) has been revised;
- d) in 4.1 and 4.2, the German translation of “should” (*sollte*) has been replaced by the German translation of “shall” (*sind zu*) in the last sentence respectively;
- e) furthermore, the limit values for N-nitrosamines and N-nitrosatable substances in elastomers have been revised;
- f) in 6.1, CAS numbers for the reagents have been added and the requirement that saliva test solution that has been kept for more than five days shall not be used has been added;
- g) an additional subclause 6.2.6.3 on “Calibration solutions for elastomers” has been added;
- h) in 6.3, glass balls and conical flasks have been added as additional apparatus and porous graphitic carbon has been added as an alternative HPLC column;
- i) in 7.3.2, the “Sample preparation for other toys or parts of toys than balloons” has been revised;
- j) in 8.2, it has been permitted to adjust the injection volume in order to achieve a limit of quantification (LOQ) of 0,000 2 mg/l for each N-nitrosamine;

- k) in 8.4, high resolution mass spectrometry has been added as an alternative confirmation method for N-nitrosamines;
- l) in 10.1.2, the limits of detection (LOD) and quantification (LOQ) have been lowered;
- m) in Annex A.1, a rationale for the definition of elastomer has been added;
- n) in Annex A.3, the rationale for the requirements on elastomers has been extended to include additional information on the specified migration time and in Annex A.5, additional information on the migration time defined in the standard has been added in the rationale;
- o) the content of the former informative Annex B “Sample storage conditions” has been transferred to 7.1 (Sample preparation – General) and the annex has been deleted;
- p) in Annex C, the A-deviation has been updated in order to reflect modifications introduced in this revision of EN 71-12;
- q) DIN 32645 [1], EN 71-10 [3], CEN/TR 16918 [8] and Resolution 2012/160/EU [13] have been added to the Bibliography.

Previous editions

DIN EN 71-12: 2013-07

National Annex NA (informative)

Bibliography

DIN ISO 29941, *Condoms — Determination of nitrosamines migrating from natural rubber latex condoms*

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