

# Toy Safety Standard EN 71 Part 3: 2019, Migration of Certain Elements



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In April 2019, the European Committee for Standardization (CEN) issued the toy safety standard EN 71 Part 3: 2019, Migration of Certain Elements, which replaced the old standard EN 71 : Part 3 : 2013 + A3 : 2018. The old version of EN 71 Part 3 shall be withdrawn at the latest by October 2019.

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2 points you need to know :

1. Highlighted of the Changes
2. Revised clauses in New EN 71 Part 3 : 2019 version

## — 、 Highlighted of the Changes :

1. The limit value for Chromium VI of material category III will be changed from 0.2mg/kg to 0.053mg/kg. The effective day is 18 November 2019. 0.2mg/kg limit of Chromium VI will still be in used before 18 November 2019.
2. For the coating material, the requirement of particular sieving has been eliminated. The requirements of the relevant sieve (pre-Appendix C) have also been deleted. Dewaxing procedure has been changed from n-heptane for 6 hours to isooctane extraction for 60 minutes.
3. Test method of Chromium III and Chromium VI were changed from LC-ICP-MS to bio-inert LC-ICP-MS or IC-ICP-MS, which is capable of determining chromium VI at the limit values for all material categories.
4. The test method of Organotin was revised in Appendix G. The amount of organotin substances involved in this method was changed from 10 to 11 types. Form G.1 organotin component added Dimethyl Tin (DMT).



## 二、 Revised clauses in New EN 71 Part 3 : 2019 version :

Clauses	Revised Content
3	New definitions of terms: samples and laboratory samples; delete the following definitions of terms: detection limits, limits of quantitation and other materials
4	The limit value for Chromium VI of material category III will be changed from 0.2mg/kg to 0.053mg/kg. The effective day is 18 November 2019. 0.2mg/kg limit of Chromium VI will still be in used before 18 November 2019.
6	Revise the reagents and equipment list and change n-heptane to isooctane, remove the sieve, and specify that some apparatus can only be used by plastic containers.
7	The old version of Chapter 7 were split into Chapters 7 and 8 for sample preparation and migration procedures, then the sample preparation statement is easier to understand  For coated samples, the requirement for particular sieving was eliminated and the requirements for the relevant sieve (pre-Appendix C) have also been removed;  Dewaxing procedure has been changed from n-heptane for 6 hours to isooctane extraction for 60 minutes. Drying time and temperature of the filter paper also changed dewaxing ;  When the weight of the textile material is between 10 and 100 mg, the samples should be tested with adhering materials, this requirement had been removed.
8	More detailed procedures for checking the pH before and after migration has been introduced.
9	Added stability requirements and test apparatus for migration solutions of different elements (generic elements, Chromium VI, Organotin)
10	Change the calculation of Chromium III, Chromium III = total chromium – Chromium VI
11	Various test method validation were added, especially the correlation test within different laboratories, listing the data on performance of those test methods.
Ref. B	Test method validation information was added in Appendix B
Ref. C	Evaluation of reproducibility was added in Appendix B
Ref. D	Guidelines on particle size for different categories of materials was added in Annex D
Ref. E	Revise test methods for generic elements.
Ref. F	Test method of Chromium III and Chromium VI were changed from LC-ICP-MS to bio-inert LC-ICP-MS or IC-ICP-MS, which is capable of determining chromium VI at the limit values for all material categories.
Ref. G	The test method of Organotin was revised in Appendix G. The amount of organotin substances involved in this method was changed from 10 to 11 types. Form G.1 organotin component added Dimethyl Tin (DMT)
Ref. H	Some basic principles were revised and the relevant principles of sampling and dewaxing procedures were added.

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