

## TÜV Rheinland LGA Products – Information

May 2020

### ISO-Standard 8124-3:2020 Migration of certain elements Third version published in March 2020

On **16 March 2020**, the International Organization for Standardization (ISO) published [ISO 8124-3:2020](#). This is the third version of the standard ISO 8124-3 named “Safety of Toys - Part 3 - Migration of certain elements. It also **incorporates the Amendments** ISO 8124-3:2010/Amd.1:2014 and ISO 8124-3:2010/Amd.2:2018.

Parallel to the release of the current version, the previous edition of 2010 and its amendments were withdrawn.

The major changes are amendments in the **definition of paper and paperboard**, new **dewaxing methods** and addition of an **analysis method for the presence of elements**:

<b>Topic</b>	<b>ISO 8124-3:2020</b>	<b>ISO 8124-3:2010</b>	<b>Effect</b>
Definition of the materials “paper” and “paperboard”	sheet formed by irregularly intervened cellulose fibres: <ul style="list-style-type: none"> <li>○ <u>paper</u>: mass per unit area <math>\leq 400 \text{ g/m}^2</math></li> <li>○ <u>paperboard</u>: mass per unit area <math>&gt; 400 \text{ g/m}^2</math>,</li> </ul> excluding <ul style="list-style-type: none"> <li>○ materials resistant to wetting (different properties)</li> <li>○ pressed wooden fibreboards</li> </ul>	<ul style="list-style-type: none"> <li>○ <u>paper and paperboard</u>: materials having a mass per unit area <math>\leq 400 \text{ g/m}^2</math></li> <li>○ materials <math>&gt; 400 \text{ g/m}^2</math> are treated as “<u>other material</u>”</li> </ul>	heavy materials will now be treated as “paperboard” instead of “other material” <ul style="list-style-type: none"> <li>➤ test with all surface coatings</li> <li>➤ maceration prior to migration</li> </ul>
Dewaxing method	Two <u>alternative dewaxing methods (A and B)</u> using n-heptane are fully described.  <u>Other methods</u> may also be used if they are capable of completely removing non-polar ingredients.	Brief description: “enclose the test portion in hardened filter paper and remove these ingredients using n-heptane”	hardly any;  also other methods with comparable efficiency are allowed
analysis method for quantitative determination of elements	<ul style="list-style-type: none"> <li>○ New Chapter 10.1: reference to <u>ICP-OES, ICP-MS, AAS or other suitable techniques</u>.</li> <li>○ New Chapter 10.3: Calculation of Results</li> <li>○ New Annex C (informative) - <u>ICP-OES-method</u></li> </ul>	[no reference to certain test methods]	practically none; proposed methods are not binding

Further, in informative Annex D some comments concerning statistical uncertainty, pH-measurement and testing on raw material were added.

**Further technical information:**

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