

What are accredited test laboratories?

15 February 2016

It is common practice to engage testing laboratories for testing of toys and baby products to safety standards. It is therefore good to know what is meant by the term "accredited laboratory".

There are many detailed standards for toys and baby products, which specify technical requirements that the products must meet, and specify how to test to determine whether the requirements are met. In many cases, customers require that the manufacturer or the importer can show test reports to prove compliance.

It was once common that state authorities carried out tests and approved products. Nowadays, the basic principle in the EU is that there is no legal requirement for products to be tested and approved by an authority or an external testing laboratory. The requirement is instead for products to be safe. A manufacturer (or other operator) can demonstrate the safety of a product by having the products tested to show that they meet requirements in applicable standards. The manufacturer may choose to let an impartial testing laboratory conduct tests according to the standards but there are no formal obstacles to carry out the tests in an internal testing laboratory. It is often a matter of credibility - clients wish to know that the tests have been conducted by an independent laboratory and also, that the results are accurate and reliable.

Quality-assured tests

Testing laboratories have different status levels and it is common to hear that one should use "accredited" labs. Accreditation is a proficiency test made by an "accreditation body" that abides by European and international standards when assessing e.g. testing laboratories. Every EU Member State shall have a national accreditation body, which has been assigned by its national government. Examples are UKAS in the UK, COFRAC in France, SWEDAC in Sweden etc. Also, most countries outside the EU will have appointed national accreditation bodies.

When a testing laboratory wishes to become accredited, it is required that the lab performs its duties impartially, accurately and in accordance with a standard called ISO 17025 (General competence requirements for testing and calibration laboratories). ISO 17025 lays down rules



for the quality management system of the laboratory; for documentation of tests; for the staff to have the appropriate expertise; for equipment to be correctly calibrated on a regular basis; and for labs to have the premises, procedures and action plans in place in the event something deviates from the "normal". Only accreditation bodies (UKAS, COFRAC etc.) may carry out the proficiency test of a testing laboratory before accreditation. Accreditation bodies will also regularly audit the accredited testing laboratory to ensure that the activities are carried out in accordance with the requirements, such as those in the standard ISO 17025.

Accreditation covers specific standards

A testing laboratory is not only accredited "in general" - the accreditation applies to the specific methods/standards for which the laboratory has been accredited. A testing laboratory can e.g. be accredited for testing of toys according to the standard EN 71-1 "Mechanical and physical properties" and is then entitled to use an accreditation mark on their test reports, in accordance with the rules that apply: The accreditation mark shall be presented together with the number of the standard to which the laboratory has been accredited: EN ISO/IEC 17025 (this is the complete designation of the standard), as well as with the accreditation number that the laboratory has been assigned. If the same testing laboratory would carry out testing of toys in accordance with EN 71-2 "Flammability" without being accredited to this standard, it is not allowed to display the accreditation mark on the corresponding test reports.

Check the scope of the accreditation

There is, thus, good reason to check for which exact methods/standards the testing laboratory is accredited before using it. The fact that a laboratory is accredited for testing of chainsaws does not necessarily mean that the lab is competent to test toys or childcare articles.

It is not permitted for a testing laboratory to convey the impression that its accreditation covers something which they are not accredited for but unfortunately, this sometimes happens. It is a good idea to check that the accreditation mark is present on the test reports one receives. One can also search which laboratories are accredited, and for which standards, via the websites and accreditation registers of the national accreditation bodies.

International cooperation

As mentioned, there are accreditation bodies in many countries of the world. In Europe, National Accreditation Bodies are organised under the auspices of the European cooperation for Accreditation (EA). There is also an international cooperation in the form of ILAC (International Laboratory Accreditation Cooperation). Agreements between these different organisations ensure that members accept each other's accreditations. When you hire a laboratory anywhere in the world, accredited under such agreements, you should be able to



presume that the test results are as reliable as if you had hired a laboratory in your home country.

Difference between accreditation and certification

Accreditation proves e.g. that a testing laboratory is competent to perform specific testing tasks. It is normally voluntary to have an accreditation but there are areas in which it is mandatory (e.g. laboratories that analyse purified waste water must be accredited).

Certification means that a certificate is granted (after assessment), and states e.g. that a product or a management system meets the requirements of a particular standard. A company can thus, obtain a certificate indicating that their product meets the requirements of a particular standard. Test reports issued by an accredited testing laboratory can form part of the documentation used to assess if the product meets the requirements. The certificate has a high status if it has been issued by a company which is accredited (by an accreditation body) as "certification body". Persons can be certified to carry out certain tasks. It is, for example, in some countries a requirement that persons inspecting elevators are certified by an accredited certification body.