Market access requirements for batteries

1. Prelude

This leaflet describes general market access conditions for batteries and in particular the legal requirements on labeling and documentation.

In addition to the basic requirements for the labeling of batteries from the European Battery Directive 2006/66/EC (BattR) you will find explanations for the application of REACH and CLP on batteries as well as comments on legal requirements in connection with the CE marking for batteries.

This leaflet addresses manufacturers and users of batteries and is meant to apply voluntarily.

The notes are meant to help to comply with legal requirements but do not replace them.

2. Issue-specific notes

2.1. Battery Directive

According to the European Battery Directive all batteries have to be marked with the "symbol indicating separate collection" (crossed-out wheeled bin) and below, if the corresponding limit value is exceeded, with the chemical symbol for lead (Pb), cadmium (Cd) and/or mercury (Hg) (Art. 21 Battery Directive).\(^1\)

2.2. General product safety

Batteries that are intended or foreseeable used by consumers are covered by the General Product Safety Directive 2001/95/EC (GPS). Accordingly, no unsafe product should be placed on the market. The manufacturer of the product is responsible for informing consumers about the dangers posed by the product throughout the normal or reasonably foreseeable period of use and for those which are not immediately obvious without adequate warnings.

For products that are conform with listed standards, the presumption of conformity applies. At present, no battery standards are listed.

2.3. CE marking

In general, batteries are not affected by a CE marking, as they are only covered by the scope of respective policies occasionally. Whether a battery must be marked with a CE marking or not is to be proved in a given case.

In the following a range of European legislation relating to CE marking are named:

2.3.1. RoHS

The RoHS Directive (Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment; 2011/65/EU) restricts the use of certain hazardous substances in electrical and electronic equipment. Batteries and accumulators are generally exempted from the RoHS. The FAQs of the European Commission point out this as followed:

"RoHS does not apply to batteries and accumulators used in electrical and electronic equipment" (Q1.6: FAQs COM).

Accordingly it is not allowed to mark a battery with e.g. "RoHS compliant" or similar characters/pictographs, which are intended to show the conformity with the RoHS Directive.

\(^1\) Notwithstanding the above, a general marking of the battery system, e.g. with "Li-Ion", is not excluded
2.3.2. EMC Directive

The EMC Directive 2004/108/EC regulates the electromagnetic compatibility of equipment. Batteries as such do not fall under the EMC Directive (cf. Article 2, subparagraph 1b) - Definition of “apparatus”). When a battery is equipped with electrical circuits (e.g. protection electronics for secondary lithium batteries) EMC-interferences are possible in principle, and the battery is potentially within the scope of the directive. This should be proved in a given case.

2.3.3. Low Voltage Directive (LVD)

The Low Voltage Directive applies to electrical equipment designed for use at a nominal voltage between 50-1000 V for alternating current and 75-1500 V for direct current. Batteries that fall within one of these ranges underlie the requirements of the LVD and should be labeled with the CE marking. Equipment and Phenomena that are not covered by this Directive are listed in annex II of the LVD.

2.3.4. Medical Devices Directive

Crucial for the applicability of the Medical Devices Directive (93/42/EEC) is the purpose of the product. This has to be determined by the manufacturer. The directive applies to accessories from medical devices as well as on the actual medical product. If the manufacturer specifies that a battery is designed specifically for medical applications in accompanying documents or documentations, the medical devices directive applies.

2.4. REACH

With the REACH Regulation 1907/2006/EC the European chemicals legislation has been harmonized, thereby redefining various duties. REACH requires e.g. that a safety data sheet (SDS) is handed out from the supplier of a substance/mixture to the recipient of this substance/mixture (cf. Article 31). Annex II of the regulation specifies the requirements for a safety data sheet.

In the context of batteries the provision of a REACH - safety data sheet is not required under European law because batteries as by definition are products, where a SDS is not required.

Outside the EU, the relevant laws of the respective country must be observed. There is a difference e.g. between safety data sheets (SDS) of REACH to material safety data sheets (MSDS) which are primarily used in the US, Canada and Australia.

The provision of a leaflet for batteries has to be interpreted only as a product information. The following of the format of a REACH safety data sheet with the respective information is useful from a product- and working safety’s view but should not be confused with the (legal) requirements of a REACH safety data sheet. This includes, for example: no claim to actuality of the voluntary information or provision in local language.

In the context of batteries it is advisable to declare such a leaflet as "Instructions for the safe handling of batteries". The Batteries Division within the ZVEI provides templates for such leaflets containing relevant instructions at: https://www.zvei.org/verband/fachverbaende/fachverband-batterien/merkblaetter-batteriewissen-kompakt/

Furthermore, such a leaflet is not intended as a substitute for an instruction manual.

2.5. CLP Regulation/GHS

The CLP Regulation 1272/2008/EC (Classification, Labelling and Packaging of Substances and Mixtures) regulates the classification, labeling and packaging of substances and mixtures, and is based on the UN-Global Harmonized System (GHS). CLP does not apply to products, such as batteries. The exemption “explosive articles” (cf. CLP, Annex I) does not apply to batteries according to the German REACH-Helpdesk, as they do not contain explosive substances/mixtures.

In the context of batteries it must be noted that e.g. separately bottled battery acid (“acid packs”) which are usually sold with motorcycle batteries, should be labeled according to CLP.

2.6. UN Manual of Tests and Criteria

The UN Manual of Test and Criteria describes requirements for the testing and classification of lithium batteries in section 38.3. This results in no direct market access condition. However, lithium batteries which have not passed the tests on 38.3 may usually not be transported.

2.7. Standardization

Other important framework conditions on the market access of batteries are described in a series of standards. They contain for example information on labelling of batteries, among others in the DIN EN 50342 (Lead - acid starter batteries) which requires six safety pictograms for automotive batteries.

However, first and foremost standards describe technical demands on batteries.