

EUROBAT White Paper on disclosure of information on battery material composition in battery labels and the battery passport, and other issues – Recommendations to policy-makers

EUROBAT recommendations for the implementing and delegated powers in Articles 13 and 77 of the Batteries Regulation.

- The implementing act under Ar. 13(10) of the Batteries Regulation should specify that the obligation to list hazardous substances present in batteries on battery labels should only apply to substances meeting the REACH SVHC criteria, with a reporting threshold of 0.1% w/w. If policy-makers insist that all hazardous substances must be reported, beyond SVHCs, then a reporting threshold of 1% w/w should apply to those hazardous substances that don't meet the SVHC criteria. The same reporting thresholds should be introduced for the battery passport via delegated act.
- The Commission should amend Part 2 of Annex XIII to refine, or, alternatively, replace, the wording “detailed composition” for the electrodes and electrolyte. Information requirements related to the cell composition should not go beyond the basic battery chemistry and share of elements (e.g. Li-NMC 8:1:1 for the cathode).
- The implementing act under Art. 13(10) should clarify that the QR code to be affixed on SLI batteries, industrial batteries ≤ 2 kWh and portable batteries need not be changed each month or each batch number.

EUROBAT thanks the Commission for the opportunity to submit feedback following the workshop held by Ramboll (the external consultant) on 21 February on labelling in the Batteries Regulation. This position paper provides further recommendations on labelling to ensure the final rules are implementable in practice, specifically as regards the listing of hazardous substances.

In connection with the labelling issue, EUROBAT would like to shape the expected delegated act(s) revising Annex XIII of the Batteries Regulation regarding the information requirements for the battery passport.

Overall, two aspects of information requirements on substances in batteries deserve scrutiny from policy-makers. First, as mentioned, the listing of hazardous substances on the label and in the battery passport. Second, the disclosure of granular information on the composition of battery cells via the battery passport.

A third issue, linked with the need to indicate the manufacturing date and batch number of the battery for small industrial batteries and SLI batteries through the QR code, should also be addressed.

I. Information Labelling requirements under Part A of Annex VI, and Part 1 of Annex XIII of the Battery Passport – listing of hazardous substances

EUROBAT is concerned that the definition of “hazardous substances” in Art. 3(52) of the Regulation, combined with Art. 13 and Annex VI, could be interpreted in a way that would result in labels containing excessively long lists of substances.

The issue was discussed in the Ramboll battery labelling workshop of 21 February 2024. Various manufacturers pointed out that fitting all hazardous substances meeting the classification criteria in the hazard classes listed in Art. 3(52) present in batteries on the label would be impossible¹. The link with self-classifications (instead of harmonised classifications and labelling) and the breadth of hazard classes covered would render hazardous substance lists excessively long.

Commission representatives suggested that hazardous substances could be written on the label through acronyms: this would not solve the problem, given the high number of substances to be reported. The issue is related to the link with the CLP Regulation, which was designed to regulate articles, and the absence of a reporting threshold. Beyond the issue posed by the limited space on battery labels, screening for hazardous substances at a very low resolution would be overly expensive for manufacturers, and most of the time inapplicable in practice.

To solve the problem, EUROBAT proposes that the listing of hazardous substances only applies to substances meeting the criteria for the identification of substances as substances of very high concern (SVHC) under REACH and present in the battery in a concentration of 0.1% w/w or higher.

Listing all hazardous substances on labels would bring no benefits to workers', OEM, consumers' or environmental safety

The presence of hazardous substances in batteries does not translate into actual risks – as the harmful properties of those substances are addressed through risk management measures, including occupational exposure limits. Batteries are sealed articles with no risk of exposure during normal conditions of use. Batteries are not like food products, where substance information on the label is key to informing consumer choices. Listing hazardous substances on the label would not bring any benefits to consumers.

Nor would providing long lists of substances on the label help protect the environment or workers, as the risks linked with hazardous substances are only present during the manufacture and the end-of-life stage of the battery life-cycle, before and after the labels are affixed to the battery.

Recital 44 hints at a targeted reporting of hazardous substances

Recital 44 of the Regulation specifies that batteries should be labelled with all the necessary information concerning their main characteristics, including their capacity and the amount of certain hazardous substances present in the battery – “certain” is not synonymous with “all”. “Certain” may be indeed understood as SVHCs, because only some of those hazardous substances present in batteries are very hazardous or of concern.

Beyond the setting of a reporting threshold, limiting the listing of substances in the labels to SVHCs would facilitate compliance for manufacturers as these substances are already reported in the SCIP database as far as batteries are concerned.

¹ Indeed, the issue of hazardous substances reporting was found to be the most challenging aspects associated with the draft design and specifications presented by the consultant during the workshop, ahead of language and symbol issues, according to a poll ran with the workshops' participants.

EUROBAT proposals:

- Our understanding is that the obligation to report hazardous substances on the label is only limited to certain hazardous substances (see Recital 44); therefore, we believe that the obligation to list substances on battery labels should be limited to those substances that meet the SVHC criteria according to Art. 57 of REACH. The reporting threshold for substances on battery labels should be aligned with the reporting threshold in the database of substances of concern in products (SCIP) and the threshold above which the obligation to communicate information on the presence of SVHCs in articles to downstream users under Art. 33 of REACH applies. Therefore, the reporting threshold should be 0.1% w/w.
- Nonetheless, if policy-makers insist that all hazardous substances present in batteries must be reported, beyond SVHCs, we suggest that a less severe threshold applies for these other substances: we propose 1% w/w.
- Similarly, any delegated act(s) amending Annex XIII should clarify that the obligation to list hazardous substances in the battery via the battery passport should only apply from 0.1% w/w (for SVHCs) and from 1% w/w (for other hazardous substances should policy-makers insist on requiring their disclosure), to avoid mismatch with labelling requirements.
- For substances exceeding the threshold, we recommend not going beyond regulatory requirements by mandating that only the name of the hazardous substances be disclosed.

II. Annex XIII, Part 1, point (b) and Part 2, point (a) - Detailed composition, including materials used in the cathode, anode and electrolyte

Concern number 1: confidentiality

EUROBAT warns against the consequence of mandating disclosure of cell-level recipes though the battery passport, which are core business know-how, and which dissemination should be as limited as possible.

In Europe, recycling of waste lithium-ion batteries for electric vehicles is expected to be conducted by companies that often belong to the same entity as manufacturers of battery cells²: in the absence of strict confidentiality provisions the battery passport would enable transfer of confidential business information from battery cell manufacturers to their rivals, disincentivising innovation.

The name of the cathode, anode and electrolyte materials is sensitive information even within the corporate, no cell level material information at this granularity should be shared with the original equipment manufacturers. While we understand that access to cell-level information is meant to facilitate battery recycling, it is crucial that disclosure of such information to battery recyclers comes with carefully designed confidentiality provisions.

Crucially, the wording “detailed composition” in point (a) of Part B of Annex XIII is too vague for it to be applicable in practice by battery manufacturers and enforcement authorities: a delegated act introducing a definition for the

² Brunp Recycling, a subsidiary of lithium-ion battery cell manufacturers CATL, is expected to open waste treatment facilities in Europe in the coming years. Europe's largest battery recycling plant is being built at Northvolt Ett at the same location as the expected 60GWh gigafactory. BASF, the first EU-based manufacturer of cathode active materials and future producer of precursor cathode material (Harjavalta, Finland), is also starting its own lithium-ion recycling plants.

wording “detailed composition” – or introducing a new wording - is urgently required. The definition or new wording should refer to basic information on the battery chemistry (e.g. NMC 5:2:2); any information exceeding that level of granularity would be of no use to recyclers.

For the moment, the duty to disclose the “detailed composition” of the electrodes and electrolyte could be interpreted in many different ways, from the most basic information (lithium-ion vs sodium-ion) to a more detailed breakdown.

Likewise, the Commission should address the vagueness of the wording “share of renewable content” in Part 1 of Annex XIII.

The duty to disclose the “commercial warranty” (point (m) of Part 1) should also be removed. Should the Commission want to maintain this duty, then the wording “commercial warranty” should be defined: not all manufacturers have the same understanding of what is a “commercial warranty”. This is especially true for industrial batteries, and in particular customized industrial batteries, for which relations between manufacturers and downstream users are most often “business-to-business” ones, where contractual agreements usually prevail in place of a warranty – the latter being privileged for business-to-consumer relations.

EUROBAT proposals:

- The Commission should amend Part 2 of Annex XIII to define, or, preferably, replace, the wording “detailed composition” for the cathode, anode and electrolyte. Information requirements as regards the composition in point (a) of Part 2 of Annex XIII should relate to the battery chemistry and the share of elements, rounded off of the decimal for the cathode (e.g. Li-NMC 8:1:1 or 5:2:2), and basic elements for the anode and electrolyte (e.g. graphite for the anode, DMC:EC:PC 3:1:1 for the electrolyte).
- The delegated act should also amend point (d) of Part 1 of Annex XIII to define the wording “share of renewable content”.
- The obligation to disclose the “commercial warranty” should be removed. Should the Commission want to maintain this duty, then the wording “commercial warranty” should be defined.

III. The case of batteries without a battery passport: the need to change the QR code each month

Point (b) of Art. 13(6) specifies that all batteries should be marked with a QR code as of February 2027. For batteries for which the battery passport does not apply (industrial batteries ≤ 2 kWh, portable batteries and SLI batteries), the QR code should give access to the general information set out in Part A of Annex VI. This includes the battery category and information identifying the battery in accordance with Article 38(6), along with batch or serial number and the date of manufacturing of the battery (month and year).

If those rules are maintained, manufacturers of industrial batteries with a capacity ≤ 2 kWh, SLI batteries and portable batteries would need to issue a new QR code for each batch number every month, to change the batch number and fabrication date. This would mean all portable batteries under blister would come with a new QR code each batch number each month.

EUROBAT sees no added value for providing a new QR code for each batch number and each month: one QR code for each reference of battery would suffice. This should be clarified by means of the implementing act under Art. 13(10), or, if not legally feasible, during the review of the Batteries Regulation.

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EUROBAT is the association for the European manufacturers automotive, industrial and energy storage batteries. EUROBAT has more than 50 members from across the continent comprising more than 90% of the automotive and industrial battery industry in Europe. The members and staff work with all stakeholders, such as battery users, governmental organisations and media, to develop new battery solutions in areas of hybrid and electro-mobility as well as grid flexibility and renewable energy storage.