



# Battery Pass

CONTENT GUIDANCE

## QUESTION 4

**Which information will be requested for the battery passport and who will have access to it?**



The EU Battery Regulation requires a wide range of data attributes to be included in the battery passport. For EV batteries alone, Article 77 and Annex XIII outline around 80 mandatory data attributes covering the entire battery lifecycle.

The Battery Pass consortium has organised the data attributes into seven content clusters along the battery life cycle:

1. General battery and manufacturer information
2. Compliance, labels, certifications
3. Battery carbon footprint
4. Supply chain due diligence
5. Battery materials and composition
6. Circularity and resource efficiency
7. Performance and durability

The data attributes can be related to the battery model or specific to the individual battery. For the technical implementation, they can also be differentiated by as “static” (unchanging or not changing often) or “dynamic” (changing often over time).

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In addition, data is differentiated by the actors who can access it, allowing data confidentiality.

For this purpose different groups are defined for restricted data access:

- the “general public”
- “notified bodies, market surveillance authorities and the [European] Commission”
- “any natural or legal person with a legitimate interest”. Particularly the last category will be specified further by the European Commission through an Implementing Act due latest by August 2026.

You can find a detailed overview of the information held in the battery passport by battery categories and access groups below. Please note that this overview has been updated to reflect the names and characteristics of the data attributes as included in the DIN DKE Spec 99100 (to be published in Autumn 2024), and therefore differs from Figure 13 shown in the Battery Passport Content Guidance (p.61).



### Battery passport information by battery categories and access groups

Access groups:	Battery categories:
<ul style="list-style-type: none"> <li>Public</li> <li>Persons with a legitimate interest</li> <li>Notified bodies, market surveillance authorities</li> <li>Persons with a legitimate interest and Commission</li> </ul>	<ul style="list-style-type: none"> <li>All batteries below</li> <li>EV batteries (if BMS is used<sup>1</sup>)</li> <li>LMT batteries (if BMS is used<sup>1</sup>)</li> <li>Industrial batteries incl. stationary energy storage systems<sup>2</sup> &gt; 2 kWh</li> <li>Stationary battery energy storage systems &gt; 2 kWh</li> </ul>

Topic	Subtopic (if applicable)
<b>Identifiers and product data</b>	
<ul style="list-style-type: none"> <li>Battery passport identifier (recommended)</li> <li>Battery identifier</li> <li>Operator identifier and information (recommended)</li> <li>Manufacturer identifier and information</li> <li>Manufacturing place</li> <li>Manufacturing date</li> </ul>	<ul style="list-style-type: none"> <li>Date of putting battery into service (where appropriate)</li> <li>Warranty period of the battery</li> <li>Battery Warranty period of the battery</li> <li>Battery mass</li> <li>Battery status</li> </ul>
<b>Symbols, labels and documentation of conformity</b>	
<ul style="list-style-type: none"> <li>Separate collection symbol</li> <li>Symbols for cadmium and lead</li> <li>Carbon footprint label</li> <li>Extinguishing agent</li> </ul>	<ul style="list-style-type: none"> <li>Meaning of labels and symbols</li> <li>EU declaration of conformity</li> <li>Results of test reports proving compliance</li> </ul>

<b>Topic</b>	<b>Subtopic</b> (if applicable)
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**Battery carbon footprint**

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|--|--|
| <ul style="list-style-type: none"> <li>📄 Overall battery carbon footprint per functional unit</li> <li>📄 Carbon footprint of raw material acquisition and pre-processing lifecycle stage</li> <li>📄 Carbon footprint of main product production / manufacturing lifecycle stage</li> <li>📄 Carbon footprint performance class</li> </ul> | <ul style="list-style-type: none"> <li>📄 Carbon footprint of distribution lifecycle stage</li> <li>📄 Web link to public carbon footprint study</li> <li>📄 General battery and manufacturer information</li> <li>📄 Absolute battery carbon footprint (recommended)</li> </ul> |
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**Supply chain due diligence**

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|---|--|
| <ul style="list-style-type: none"> <li>📄 Information of due diligence report</li> <li>📄 Third-party assurances of recognised schemes (recommended)</li> </ul> | <ul style="list-style-type: none"> <li>📄 Supply chain indices (recommended)</li> </ul> |
|---|--|

**Battery materials and composition**

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| <ul style="list-style-type: none"> <li>📄 Battery chemistry</li> <li>📄 Critical raw materials</li> <li>📄 <b>Materials used in cathode, anode and electrolyte</b></li> </ul> | <ul style="list-style-type: none"> <li>📄 Hazardous substances</li> <li>📄 Impact of substances on environment, human health, safety, persons</li> </ul> |
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**Circularity and resource efficiency**

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|---|---|--------------------------------|
| <ul style="list-style-type: none"> <li>📄 <b>Dismantling information: Manuals for the removal and the disassembly of the battery pack</b></li> <li>📄 <b>Part numbers for components</b></li> <li>📄 <b>Postal address of sources for spare parts</b></li> </ul> | <ul style="list-style-type: none"> <li>📄 <b>E-mail address of sources for spare parts</b></li> <li>📄 <b>Web address of sources for spare parts</b></li> <li>📄 <b>Safety measures</b></li> </ul> | <b>Circularity information</b> |
|---|---|--------------------------------|

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>📄 Pre-consumer recycled content share of Ni/Co/Li/Pb</li> <li>📄 Renewable content share</li> </ul> | <ul style="list-style-type: none"> <li>📄 Post-consumer recycled content share of Ni/Co/Li/Pb</li> </ul> | <b>Recycled &amp; renewable content</b> |
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| <ul style="list-style-type: none"> <li>📄 Information on the role of end-users in contributing to waste prevention</li> <li>📄 Information on the role of end-users in contributing to separate collection of waste batteries</li> </ul> | <ul style="list-style-type: none"> <li>📄 Information on the separate collection, the take back, collection points and preparation for re-use, preparation for repurposing and treatment available for waste batteries</li> </ul> | <b>Role of end-user in waste prevention and collection</b> |
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**Performance & Durability**

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| <ul style="list-style-type: none"> <li>📄 Rated capacity</li> <li>📄 Capacity fade</li> <li>📄 <b>Certified usable battery energy (recommended)</b></li> <li>📄 Minimal, nominal and maximum voltage, with temperature ranges when relevant</li> </ul> | <ul style="list-style-type: none"> <li>📄 <b>Remaining capacity</b></li> <li>📄 <b>Remaining usable battery energy (recommended)</b></li> <li>📄 <b>State of certified energy (SOCE)</b></li> <li>📄 <b>State of charge (SoC)</b></li> </ul> | <b>Capacity, energy and voltage</b> |
|--|--|-------------------------------------|

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| <ul style="list-style-type: none"> <li>📄 Original power capability</li> <li>📄 Power fade</li> <li>📄 Maximum permitted battery power</li> <li>📄 Ratio between nominal battery power and battery energy (recommended)</li> </ul> | <ul style="list-style-type: none"> <li>📄 <b>Where possible, remaining power capability</b></li> </ul> | <b>Power Capability</b> |
|--|---|-------------------------|

Static Data

Dynamic Data

**Topic**  
Performance & Durability (cont'd)

**Subtopic**  
(if applicable)

Static Data	Dynamic Data	Subtopic
<ul style="list-style-type: none"> <li>Initial round trip energy efficiency</li> <li>Where applicable, round trip energy efficiency fade</li> <li>Round trip energy efficiency at 50% of cycle life</li> <li>Initial self-discharge rate</li> </ul>	<ul style="list-style-type: none"> <li>Where possible, remaining round trip energy efficiency</li> <li>Current self-discharge rate</li> <li>Evolution of self-discharge rate (recommended)</li> </ul>	Energy round trip efficiency, Self-discharge
<ul style="list-style-type: none"> <li>Internal battery resistance (cell &amp; pack)</li> <li>Internal resistance increase (pack; cell/module recommended)</li> </ul>		Internal Resistance
<ul style="list-style-type: none"> <li>Expected lifetime in calendar years</li> <li>Commercial warranty period</li> <li>Expected lifetime: Number of charge-discharge cycles</li> <li>Cycle-life Reference test</li> <li>C-rate of relevant cycle-life test</li> <li>Capacity threshold for exhaustion</li> </ul>	<ul style="list-style-type: none"> <li>Number of full charging and discharging cycles</li> <li>Capacity throughput</li> <li>Energy throughput</li> </ul>	Battery lifetime
<ul style="list-style-type: none"> <li>Temperature range idle state (lower boundary)</li> <li>Temperature range idle state (upper boundary)</li> </ul>	<ul style="list-style-type: none"> <li>Temperature information</li> <li>Time spent charging during extreme temperatures</li> <li>Time spent in extreme temperatures</li> </ul>	Temperature conditions
	<ul style="list-style-type: none"> <li>Number of deep discharge events (recommended for EV, industrial)</li> <li>Number of overcharge events (recommended)</li> <li>Information on accidents</li> </ul>	Negative events

1) BMS limitation: Data specified for all battery categories must be reported regardless of BMS use  
 2) Category listed as part of entire battery passport scope. No data attribute applies solely to this battery category  
 Please refer to the DIN DKE Spec 99100 text and the Excel document "Battery Passport Data Longlist" for more information.

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