

DIN DKE SPEC 99100:2025-02 (E)

Requirements for data attributes of the battery passport; Text in English

Inhalt	Seite
Foreword	5
Introduction.....	8
1 Scope.....	9
2 Normative references	9
3 Terms and definitions.....	10
4 Abbreviations	18
5 Introduction to the battery passport	19
5.1 Legislation	19
5.2 Battery passport access.....	21
5.2.1 Access to battery passport information.....	21
5.2.2 Access groups	22
5.3 Labelling.....	22
5.4 Data attributes overview	24
6 Battery passport content requirements	27
6.1 Identifiers and product data.....	27
6.1.1 Overview	27
6.1.2 Identifier	30
6.1.3 Product data.....	32
6.2 Symbols, labels and documentation of conformity	34
6.2.1 Overview	34
6.2.2 Separate collection symbol	36
6.2.3 Symbols for cadmium and lead.....	36
6.2.4 Carbon footprint label	36
6.2.5 Extinguishing agent	37
6.2.6 Meaning of labels and symbols	37
6.2.7 EU declaration of conformity.....	37
6.2.8 Results of test reports proving compliance	38
6.3 Battery carbon footprint.....	38
6.3.1 Overview	38
6.3.2 Battery carbon footprint per Functional Unit.....	40
6.3.3 Contribution of raw material acquisition and pre-processing lifecycle stage.....	41
6.3.4 Contribution of main product production/manufacturing lifecycle stage.....	41
6.3.5 Contribution of distribution lifecycle stage	41
6.3.6 Contribution of end of life and recycling lifecycle stage	42
6.3.7 Carbon footprint performance class	42
6.3.8 Web link to public carbon footprint study.....	43
6.3.9 General battery and manufacturer information	43
6.3.10 Absolute battery carbon footprint.....	43
6.4 Supply chain due diligence.....	43
6.4.1 Overview	43
6.4.2 Information of due diligence report in the Battery Passport.....	45
6.4.3 Third-party assurances of recognised schemes	46
6.4.4 Supply chain indices.....	46
6.5 Battery materials and composition	46
6.5.1 Overview	46

6.5.2	Battery chemistry.....	48
6.5.3	Critical raw materials	48
6.5.4	Materials used in cathode, anode and electrolyte.....	48
6.5.5	Hazardous substances	49
6.5.6	Impact of substances on environment, human health, safety, persons.....	50
6.6	Circularity and resource efficiency	50
6.6.1	Circularity information	50
6.6.2	Recycled and renewable content	53
6.6.3	Information on role of end-users in waste prevention and information on battery collection, preparation for second life and on treatment at end of life	56
6.7	Performance and durability	57
6.7.1	General	57
6.7.2	Capacity, energy, and voltage	60
6.7.3	Power capability.....	66
6.7.4	Round trip energy efficiency and self-discharge.....	70
6.7.5	Internal resistance.....	75
6.7.6	Battery lifetime	78
6.7.7	Temperature conditions	83
6.7.8	Negative Events.....	87
	Annex A (informative) Data attribute longlist.....	90
	Annex B (informative) Due diligence report.....	94
B.1	Obligations for economic operators on due diligence policies	94
B.2	Guidelines to align activities and reporting	95
	Annex C (informative) Recycled content targets.....	96
	Annex D (informative) References to Regulations.....	97
	Bibliography.....	108

Figures

Figure 1	— Battery passport information flow in the Battery Regulation	20
Figure 2	— Delegated & Implementing Acts scheduled by the Battery Regulation.....	21
Figure 3	— Battery passport information by battery categories and access groups	26
Figure 4	— Separate collection symbol (see BattReg Annex VI Part B)	36
Figure 5	— Cross references including the source information of performance and durability requirements	59

Tables

Table 1	— Information displayed on the battery label.....	23
Table 2	— Battery passport data attributes related to identifiers and to general battery properties	28
Table 3	— Overview of battery passport data attributes for symbols, labels and documentation of conformity.....	35
Table 4	— Battery passport data attributes related to the battery carbon footprint.....	39

Table 5 — Mandatory and suggested supply chain due diligence information to be made available via the battery passport.....	44
Table 6 — Battery passport data attributes related to battery materials and composition	47
Table 7 — Circularity information — data attributes	50
Table 8 — Recycled and renewable content — data attributes	53
Table 9 — Role of end-users in waste prevention and collection — data attributes	56
Table 10 — Data attributes with regard to battery capacity, energy and voltage	61
Table 11 — Data attributes regarding power capability	67
Table 12 — Data attributes regarding round trip energy efficiency.....	71
Table 13 — Data attributes regarding internal resistance and electrochemical impedance	76
Table 14 — Data attributes regarding battery lifetime.....	79
Table 15 — Data attributes regarding temperature conditions.....	84
Table 16 — Data attributes regarding negative events.....	87
Table A.1 — Data attribute longlist.....	90
Table C.1 — Mandatory recycled content targets for battery materials in the EU Battery Regulation.....	96
Table D.1 — References for data attributes and their requirements to the EU Battery Regulation and other regulation.....	97