

ICS 29.220.99

CCS K82



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 40559-2024

Replacing GB/T 40559-2021

**Lithium ion cells and batteries used in electric self-balancing
vehicle and scooters - Safety technical specification**

电动平衡车、滑板车用锂离子电池和电池组 安全技术规范

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Foreword

This document was issued on 24 July 2024 by the State Administration for Market Regulation and the Standardization Administration of the People's Republic of China, and has been in force since 1 August 2025.

It replaces GB/T 40559-2021.

Classification: ICS 29.220.99, CCS K82.

1 Scope

GB 40559-2024 is the Chinese national standard on lithium ion cells and batteries used in electric self-balancing vehicle and scooters - safety technical specification, in the field of electrical engineering. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 24 July 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 August 2025. Classification: ICS 29.220.99, CCS K82. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

2 Edition and transition

GB 40559-2024 is the current edition. It was issued on 24 July 2024 and has been in force since 1 August 2025, replacing GB/T 40559-2021.

GB/T 40559-2021 has been superseded: a specification that still cites it is citing a withdrawn edition.

The interval between issue and effect is the transition period. It exists so that producers, laboratories and buyers can requalify products, revise procedures and use up documentation before the new text becomes the one that applies. The date on this page is the official one from the record of the Standardization Administration.

3 Classification and status

GB 40559-2024 is classified under ICS 29.220.99, in the field of electrical engineering. ICS is the International Classification for Standards, the same scheme used by ISO and by the national bodies of most countries, which is what allows a Chinese standard to be placed beside its foreign counterparts on subject rather than on number.

Its Chinese Standard Classification code is CCS K82. CCS is the domestic scheme, a letter for the sector and two digits for the subject within it, and it is the code by which the standard is filed and searched in China.

The GB prefix without a suffix marks a mandatory national standard: compliance is required by law for the products or activities within its scope, and a product that does not meet it may not lawfully be placed on the Chinese market.

4 Structure of the document

Chinese national standards are drafted to the rules of GB/T 1.1, which fixes the order in which a standard is set out. The document opens with a foreword recording the issuing bodies, the relationship to any previous edition and the technical committee responsible for it. Clause 1 is the scope. Clause 2 lists the normative references - the other standards that have to be applied together with this one, and without which its requirements cannot be met. Clause 3 gives the terms and definitions. The technical clauses follow: the requirements themselves, the test or measurement methods by which conformity is established, the inspection rules that say how a lot is sampled and judged, and, for a product standard, the provisions on marking, packaging, transport and storage. Annexes, normative or informative, come last.

GB 40559-2024 runs to 30 pages in the English translation. What is delivered is the complete document in that order: every clause, every table, every figure and every annex of the Chinese original, with the same numbering, so that a reference to a clause number in a contract or a test report points to the same place in both languages.

5 The English edition

The English edition of GB 40559-2024 is a full translation of the official Chinese text, not a summary, an abstract or a machine rendering left unchecked. Clause and subclause numbers, table and figure numbers and annex letters are those of the original, because they are what a specification, a purchase order or a test report cites.

Technical terms are translated against the vocabulary standards of the same field, so that a term used in GB 40559-2024 reads the same way as in the other Chinese standards it is used beside. Where a term has an established English form in an ISO or IEC document on the same subject, that form is used; where China's term has no foreign counterpart, it is translated literally and the Chinese is kept alongside it rather than replaced by an approximation.

Quantities, units and symbols are carried over unchanged. Chinese standards use SI, so a value in the translation is the value in the original document, not a conversion, and a limit read from the English text is the limit that will be applied by a Chinese inspection body reading the Chinese one.

This page is compiled from the official publication record: the standard number and both titles, the issuing bodies, the dates of issue and effect, the edition it replaces, and the ICS and CCS classification. The requirements, limits, tables and test conditions are in the document itself.