

# Safety technical specification of lithium-ion battery for electric bicycle

## 1 Scope

This document specifies the electrical, mechanical and environmental safety requirements for lithium-ion cells and batteries for electric bicycles, and describes the corresponding test methods.

This document is applicable to lithium-ion cells and batteries for electric bicycles (hereinafter referred to as cells and batteries) specified in GB 17761.

## 2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this document. For dated references, only the edition cited applies. For undated references, the latest edition (including any amendments) applies.

GB/T 2423.4-2008	<i>Environmental testing for electric and electronic products - Part 2: Test method - Test Db: Damp heat, cyclic (12h+12h cycle)</i>
GB/T 2423.18-2021	<i>Environmental testing - Part 2: Test methods - Test Kb: Salt mist, cyclic (sodium chloride solution)</i>
GB/T 5169.5-2020	<i>Fire hazard testing for electric and electronic products - Part 5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance</i>
GB/T 5169.16	<i>Fire hazard testing for electric and electronic products - Part 16: Test flames - 50W horizontal and vertical flame test methods</i>
GB/T 17626.2	<i>Electromagnetic compatibility - Testing and measurement techniques - Electrostatic discharge immunity test</i>
GB 17761	<i>Safety technical specification for electric bicycle</i>
GB/T 36945-2018	<i>Vocabulary of lithium-ion batteries for electric bicycle</i>

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in GB/T 36945-2018 and the following apply.

### 3.1

#### **rated capacity**

value of the capacity of a cell or battery measured under specified conditions and rated by the manufacturer