

For Comments Only

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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भारतीय मानक मसौदा

**अंतरिक्ष प्रणालियां — अंतरिक्ष वाहनों के लिए लिथियम आयन की
बैटरी — डिज़ाइन और सत्यापन की अपेक्षाएं**

Draft Indian Standard

**Space Systems — Lithium Ion Battery for Space
Vehicles — Design and Verification Requirements**

ICS: 49.140

**Air and Space Vehicles Sectional Committee, TED 14 Last date for receipt of comments is
28/08/2024**

NATIONAL FOREWORD

(Identical Clause to be added later)

The text of ISO standard has been proposed as suitable for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

The technical committee has reviewed the provisions of the following International Standard referred in this adopted standard and has decided that it is acceptable for use in conjunction with this standard. For undated references, the latest edition of the referenced document applies, including any corrigenda and amendment.

<i>International Standard</i>	<i>Title</i>
ISO 24113	Space systems — Space debris mitigation requirements

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

This Standard also makes a reference to the BIS Certification Marking of the Product. Details of which is given in National Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

SCOPE

This document specifies design and minimum verification requirements for lithium-ion batteries from the perspectives of performance, safety and logistics.

This document is applicable to battery assemblies for space vehicles and component cells of batteries, which are critical devices to be harmonized with standards and regulations for other industries. In addition, this document is applicable to component cells which are not designed for space vehicles but can be used in space.

FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 17546: 2016 or CONTACT:

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NATIONAL ANNEX A
(National Foreword)

A-1 BIS CERTIFICATION MARKING

A-1.1 The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark