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Part 5: Chemical loads

Véhicules routiers — Spécifications d'environnement et essais de l'équipement électrique et électronique pour les véhicules à propulsion électrique —

Partie 5: Contraintes chimiques

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Contents

Page

Foreword ..... **iv**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Tests **1**

4.1 General 1
4.2 Purpose 2
4.3 General test conditions 2
4.4 DUT conditioning 2
4.5 Test agent conditioning 2
4.6 Application method 2
4.7 Test conditions 2
4.8 Procedure 4
4.9 Requirements 5

5 Documentation **5**

Bibliography **7**

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Foreword

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A list of all parts in the ISO 19453 series can be found on the ISO website.

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Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles —

Part 5: Chemical loads

1 Scope

This document specifies requirements for the electric propulsion systems and components with maximum working voltages according to voltage class B. It does not apply to high voltage battery packs (e.g. for traction) and systems and components inside. It describes the potential environmental stresses and specifies tests and requirements recommended for different stress levels on/in the vehicle.

This document describes chemical loads.

NOTE Conditions and testing for a continuous contact can be determined from other standards or agreed upon between the customer and the supplier.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 19453-1, *Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles — Part 1: General*

ISO 19453-4, *Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles — Part 4: Climatic loads*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 19453-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

4 Tests

4.1 General

Components and associated parts that can come into contact with the specified chemical agents shall be resistant to those agents. The components and associated parts shall be tested with all agents they are likely to come into contact with, except for those materials which can be shown by documentary evidence to be immune to the contaminant and which need not be tested.

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