
**Motorcycles — Measurement method
for evaporative emissions —**

**Part 2:
Permeation test procedure**

*Motorcycles — Méthode de mesure pour les émissions par
évaporation —*

Partie 2: Méthode d'essai de perméation



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 22, *Road Vehicles*, Subcommittee SC 38, *Motorcycles and mopeds*.

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Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document specifies the measurement method for evaporative emissions from motorcycles by using a permeation test procedure. However, the amount of permeation from a non-metallic fuel tank is generally larger than that from a metallic fuel tank. Therefore, this document also specifies a permeability test procedure in an informative annex solely for non-metallic fuel tanks as optional. This permeability test procedure is expected to be used also by fuel tank manufacturers.

Motorcycles — Measurement method for evaporative emissions —

Part 2: Permeation test procedure

1 Scope

This document specifies a basic measurement method by using a permeation test procedure for evaporative emissions from motorcycles. It is applicable to motorcycles equipped with a fuel tank to store liquid high volatile fuel and with a spark ignition engine (four-stroke engine, two-stroke engine or rotary piston engine).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

permeability

losses through the walls of the non-metallic fuel tank

3.2

permeation

losses through the walls of the fuel tank and fuel line assembly

4 Fuel tank and fuel line assembly permeation test procedure

4.1 Description of the fuel tank permeation test

4.1.1 Measure permeation emissions by weighing a sealed fuel tank before and after a temperature-controlled soak according to the following flow charts (see [Figure 1](#)).