### INTERNATIONAL STANDARD



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# Road vehicles — Recyclability and recoverability — Calculation method

Véhicules routiers — Recyclabilité et valorisabilité — Méthode de calcul



Reference number ISO 22628:2002(E)

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#### Foreword

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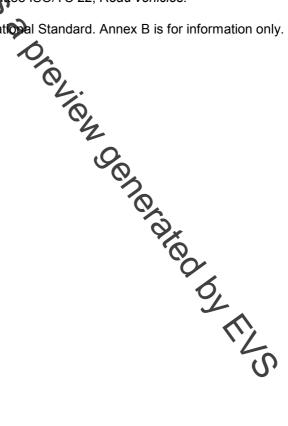
International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical computtees is to prepare International Standards. Draft International Standards adopted by the technical committees and circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility the some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 22628 was prepared by Technical Committee ISO/TC 22, Road vehicles.

Annex A forms a normative part of this International Standard. Annex B is for information only.



#### Introduction

End-of-life road vehicles contribute to the total volume of waste to be treated. As part of the road vehicle life cycle, it is essential that recovery issues be taken into consideration during the design phase for environmentally sound treatment to be ensured.

Today, recycling has to be aken into account in addition to safety, emissions and fuel consumption when designing a road vehicle. Consequently, there is need for an indicator for evaluating the ability and potential of new vehicles to be recovered/recycled. **?**}

The method for calculating recyclability and recoverability rates specified by this International Standard is based on four main stages inspired by the treatment of end-of-life road vehicles. Recyclability/recoverability rates depend on the design and material properties of new vehicles, and on the consideration of proven technologies - those technologies which have been successfully tested, at least on a laboratory scale, in this context.

technologies which have been successfully tested, at least on a laboratory scale, in this context. The calculation method of this International Standard cannot reflect the process that will be applied to the road vehicle at the end of its life.

## Road vehicles — Recyclability and recoverability — Calculation method

#### 1 Scope

This International Standard specifies a method for calculating the recyclability rate and the recoverability rate of a new road vehicle, each expressed as a percentage by mass (mass fraction in percent) of the road vehicle, which can potentially be

recycled, reused or both (recyclability rate), or

recovered, reused or both (recoverability rate).

The calculation is performed by the vehicle manufacturer when a new vehicle is put on the market.

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#### 2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreemente based on this International Standard are encouraged to investigate the possibility of applying the most recent exition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 1176, Road vehicles — Masses — Vocabulary and codes C

#### 3 Terms and definitions

For the purposes of this International Standard, terms and definitions give in ISO 1176 and the following apply (see Figure 1).

#### 3.1

#### vehicle mass

 $m_V$ 

complete vehicle shipping mass, as specified in ISO 1176, plus the mass of lubricants, coelant (if needed), washer fluid, fuel (tank filled to at least 90 % of the capacity specified by the manufacturer), spare wheel(s), fire extinguisher(s), standard spare parts, chocks, standard tool-kit

NOTE Adapted from ISO 1176, "complete vehicle kerb mass".

#### 3.2

#### re-use

any operation by which component parts of end-of-life vehicles are used for the same purpose for which they were conceived