

Transportation loads - Measurement and evaluation of climatic and other loads - Data acquisition and general requirements for measuring equipment

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

**Transportation loads - Measurement and evaluation of climatic
and other loads - Data acquisition and general requirements for
measuring equipment**

Charges de transport - Mesurage et évaluation des
contraintes climatiques et d'autres contraintes - Acquisition
de données et exigences générales relatives aux appareils
de mesure

Transportbelastungen - Messen und Auswerten von
klimatischen und sonstigen Belastungen - Datenerfassung
und allgemeine Anforderungen an Messeinrichtungen

This European Standard was approved by CEN on 12 January 2013.

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Foreword

This document (EN 16210:2013) has been prepared by Technical Committee CEN/TC 261 “Packaging”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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Introduction

This document was originally prepared by the Packaging Standards Committee (NAVp), NA 115-01-04 AA "Requirements and Testing" of the German Standardisation Institute (DIN). It is part of a complete normative concept to acquire and describe climatic and other loads, which can occur and affect goods during transport, handling and storage.

This standard obtains a significant meaning in order to fulfil the requirements of the European Directive on Packaging and Packaging Waste (Directive 94/62/EC dated 20th December 1994). These requirements ask for avoidance or reduction of packaging waste, and that the required amount of packaging material be tuned to the expected transportation load, in order to protect the transported item adequately. However, this presumes some knowledge of the climatic and other loads which occur during shipment.

At present, basic standards which describe and characterise in adequate form the magnitude of the transportation loads, based on scientifically confirmed values do not exist in the national and international world of standards. The reasons for this are mainly the absence of published data, insufficient description of the measurements, or restrictions on the dissemination of this information.

With this document, it will be possible to measure and analyse climatic and other transportation loads, thus allowing standardised and adequately documented load values to be produced.

1 Scope

This European Standard specifies the documentation of measurements for climatic and other loads (such as sunlight, sand, dust and electromagnetic radiation) during transport, handling and storage.

2 Terms and definitions

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

2.1

data acquisition

acquisition of raw data by measuring the load-time function with the aid of measuring equipment

2.2

measuring equipment

recording device, consisting at least of a sensor, signal conditioner, data recorder and data storing device

2.3

measuring report

documentation covering all details acquired during the data acquisition

3 General

Table 1 shows climatic and other loads that can occur on various transported items during transport.