# Tanks for transport of dangerous goods - Service equipment for tanks Pressure and vaccum breather vent

Tanks for transport of dangerous goods - Service equipment for tanks - Pressure and Vacuum Breather Vent



#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 14595:2005 sisaldab Euroopa standardi EN 14595:2005 ingliskeelset teksti.

Käesolev dokument on jõustatud 30.05.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14595:2005 consists of the English text of the European standard EN 14595:2005.

This document is endorsed on 30.05.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European standard covers the pressure and vacuum breather vent used to ensure normal tank compartment breathing. It specifies the performance requirements and the critical dimensions of the pressure and vacuum breather vent. It also specifies the tests necessary to verify the compliance of the equipment with this standard

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Võtmesõnad:

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English version**

## Tanks for transport of dangerous goods - Service equipment for tanks - Pressure and Vacuum Breather Vent

Citernes destinées au transport de matières dangereuses -Equipements de service pour citernes - Event de pression et de dépression Tanks für die Beförderung gefährlicher Güter -Bedienungsausrüstung von Tanks - Über- und Unterdruckbelüftung

This European Standard was approved by CEN on 3 February 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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#### **Foreword**

This document (EN 14595:2005) has been prepared by Technical Committee CEN/TC 296 "Tanks for transport of dangerous goods", 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 2005, and conflicting national standards shall be withdrawn at the latest by September 2005.

This document forms part of a coherent standards programme (i.e. Tanks for transport of liquid dangerous goods with vapour pressure not exceeding 110 kPa (absolute pressure) at 50° C and petrol - Service Equipment).

This standards programme comprises the following standards:

EN 13081, Tanks for transport of dangerous goods - Service equipment for tanks - Vapour collection adaptor and coupler.

EN 13082, Tanks for transport of dangerous goods - Service equipment for tanks - Vapour transfer valve.

EN 13083, Tanks for transport of dangerous goods - Service equipment for tanks - Adaptor for bottom loading and unloading.

EN 13308, Tanks for transport of dangerous goods - Service equipment for tanks - Non-pressure balanced footvalve.

EN 13314, Tanks for transport of dangerous goods - Service equipment for tanks - Fill hole cover.

EN 13315, Tanks for transport of dangerous goods - Service equipment for tanks - Gravity discharge coupler.

EN 13316, Tanks for transport of dangerous goods - Service equipment for tanks - Pressure balanced footvalve.

EN 13317, Tanks for transport of dangerous goods - Service equipment for tanks - Manhole cover assembly.

EN 14595, Tanks for transport of dangerous goods - Service equipment for tanks - Pressure and Vacuum Breather Vent.

EN 14596, Tanks for transport of dangerous goods - Service equipment for tanks - Emergency pressure relief valve.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

#### Introduction

A pressure and vacuum breather vent allows normal tank compartment breathing.

The pressure and vacuum breather vent may be an integral part of the Vapour Transfer Valve or other devices.

Jump bi, refety valve . The pressure and vacuum breather vent forms part of an ADR [1] venting system, see 6.8.2.2.6 of ADR 2005, and NOTE should not be considered as a safety valve as defined in ADR.

#### 1 Scope

This document covers the pressure and vacuum breather vent used to ensure normal tank compartment breathing.

It specifies the performance requirements and the critical dimensions of the pressure and vacuum breather vent. It also specifies the tests necessary to verify compliance of the equipment with this document.

The service equipment specified by this document is suitable for use with liquid petroleum products and other dangerous substances of Class 3 of ADR [1] which have a vapour pressure not exceeding 110 kPa at 50 °C and petrol, and which have no sub-classification as toxic or corrosive.

#### 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 12266-1:2003, Industrial valves – Testing of valves – Part 1: Pressure tests, test procedures and acceptance criteria - Mandatory requirements.

EN 12266-2, Industrial valves – Testing of valves – Part 2: Tests, test procedures and acceptance criteria - Supplementary requirements.

EN ISO 228-1, Pipe threads where pressure-tight joints are not made on the threads – Part 1: Dimensions, tolerances and designation (ISO 298-1:2000).

ISO 2859-1, Sampling procedures for inspection by attributes – Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection.

#### 3 Terms and definitions

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

#### 3.1

#### relieving pressure

pressure at which the pressure and vacuum breather vent starts to open

#### 3.2

#### maximum working pressure (MWP) (gauge pressure)

the maximum pressure to which the equipment is designed to operate, being:

highest of the following three pressures:

- a) highest effective pressure allowed in the tank during filling (maximum filling pressure allowed);
- b) highest effective pressure allowed in the tank during discharge (maximum discharge pressure allowed); and
- c) effective gauge pressure to which the tank is subjected by its contents (including such extraneous gases as it may contain) at the maximum working temperature.