

### SLOVENSKI STANDARD SIST EN 13082:2009+A1:2012

01-junij-2012

Nadomešča:

SIST EN 13082:2009

Cisterne za prevoz nevarnega blaga - Oprema za obratovanje cistern - Ventil za izenačitev parnega tlaka (vključno z dopolnilom A1)

Tanks for transport of dangerous goods - Service equipment for tanks - Vapour transfer valve

Tanks für die Beförderung gefährlicher Güter Bedienungsausrüstung von Tanks - Gaspendelventil (standards.iteh.ai)

Citernes de transport de matières dangereuses de feuipement de service pour citernes -Évent de transfert des vapeurs récupérées udards/sist/17027928-ed7f-4eab-9693be5c92037911/sist-en-13082-2009a1-2012

Ta slovenski standard je istoveten z: EN 13082:2008+A1:2012

#### ICS:

13.300	Varstvo pred nevarnimi izdelki	Protection against dangerous goods
23.020.20	Posode in vsebniki, montirani na vozila	Vessels and containers mounted on vehicles
23.060.20	Zapirni ventili (kroglasti in pipe)	Ball and plug valves

SIST EN 13082:2009+A1:2012 en,fr,de

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EN 13082:2008+A1

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

February 2012

ICS 13.300; 23.020.20; 23.060.20

Supersedes EN 13082:2008

#### **English Version**

### Tanks for transport of dangerous goods - Service equipment for tanks - Vapour transfer valve

Citernes de transport de matières dangereuses -Équipement de service pour citernes - Évent de transfert des vapeurs récupérées Tanks für die Beförderung gefährlicher Güter -Bedienungsausrüstung von Tanks - Gaspendelventil

This European Standard was approved by CEN on 13 September 2008 and includes Amendment 1 approved by CEN on 24 December 2011.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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#### **Foreword**

This document (EN 13082:2008+A1:2012) 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 August 2012, and conflicting national standards shall be withdrawn at the latest by August 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes (A) EN 13082:2008 (A).

This document includes Amendment 1 approved by CEN on 2011-12-24.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A] (A].

This European Standard has been submitted for reference into the RID and/or in the technical annexes of the ADR [2]. A deleted text

This European Standard forms part of a coherent standards programme comprising the following standards,, under the general title "Tanks for transport of dangerous goods - Service equipment for tanks":

EN 13081, Vapour collection adaptor and coupler

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EN 13082, Vapour transfert valvels.itch.ai/catalog/standards/sist/17027928-ed7f-4eab-9693-

be5c92037911/sist-en-13082-2009a1-2012

EN 13083, Adaptor for bottom loading and unloading

EN 13308, Non-pressure balanced footvalve

EN 13314, Fill hole cover

EN 13315, Gravity discharge coupler

EN 13316, Pressure balanced footvalve

EN 13317, Manhole cover assembly

EN 13922, Overfill prevention systems for liquid fuels

EN 14595, Pressure and Vacuum Breather Vent

EN 14596, Emergency pressure relief valve

EN 15208, Sealed parcel delivery systems – Working principles and interface specifications

The standards programme also includes the following Technical Report:

CEN/TR 15120, Guidance and recommendations for loading, transport and unloading.

(A) Compared to EN 13082:2008 the following changes have been made:

a) in the Foreword, the second sentence of the fifth paragraph has been deleted;

b) in Clause 4, it has been added that the vapour transfer valve shall be provided with a means to indicate that it is open. [A]

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

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#### Introduction

The vapour transfer valve is part of the vapour collection system that is required to comply with the European Directive 94/63/EC on Volatile Organic Compounds (VOC) [1].

The vapour transfer valve, subject of this European Standard, governs the transfer of vapour between the vehicle compartment, the gantry equipment and the service-station tank storage during loading and unloading operations.

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#### 1 Scope

This European Standard covers the vapour transfer valve, used for the transfer of vapour between the tank compartment and the pipework connecting to the vapour collection adaptor.

This European Standard specifies the performance requirements and the critical dimensions of the vapour transfer valve. It also specifies the tests necessary to verify the compliance of the equipment with this European Standard. The equipment specified by this standard is suitable for use with liquid petroleum products and other dangerous substances of Class 3 of ADR [2] 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 12266-2:2002, Industrial valves — Testing of valves — Part 2: Tests, test procedures and acceptance criteria — Supplementary requirements

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

#### 3 Terms and definitions

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

#### 3.1

#### vapour collection manifold

volume into which each vapour transfer valve from each compartment is connected and which connects to the vapour collection adaptor

#### 3.2

#### Maximum Working Pressure (MWP) (gauge pressure)

maximum pressure to which the equipment is designed to operate, being the 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)
- 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

#### 3.3

#### sequential function

ability to provide a 'valve open' signal

#### 4 Functions

The vapour transfer valve shall:

 when opened, allow the transfer of vapour between the tank compartment and the vapour collection manifold;

#### $A_1$

- be provided with a means to indicate that it is open; [A]
- when closed, ensure the confinement of the transported vapour and/or liquid in any orientation.

When open, the vapour transfer valve may prevent the transfer of liquid between tank compartments via the vapour collection manifold.

#### 5 Design characteristics

#### 5.1 General

If the vapour transfer valve incorporates other functionalities, such as the pressure and vacuum breather vent, they shall not jeopardize or modify the requirements of this European Standard.

### 5.2 Performance characteristics NDARD PREVIEW

The manufacturer shall provide the pressure drop curve at the following conditions:

— flow rate up to 300 standard m³/hSof air lat 202°C (300 standard m³/h of air corresponds to the bottom loading of the compartment at it 50 im³/h flow of substances) 28-ed7f-4eab-9693-be5c92037911/sist-en-13082-2009a1-2012

#### 5.3 Temperature range

Unless otherwise specified, the design temperature range shall be -20 °C to +50 °C.

Where the vapour transfer valve is subjected to more severe conditions, the design temperature range shall be extended to -40 °C or +70 °C as applicable.

#### 5.4 Actuation

The vapour transfer valve may be operated by remote means.

The vapour transfer valve may have a sequential function.

In case of failure of the operating devices, the valve shall return automatically to its closed position.

#### 5.5 Materials of construction

The manufacturer shall provide with the equipment a full material specification for those parts that may come into contact with the substances described by Clause 1.