



**NSAI**  
Standards

Irish Standard  
I.S. EN 16522:2014

# Tanks for transport of dangerous goods - Service equipment for tanks - Flame arresters for breather devices

**I.S. EN 16522:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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EUROPEAN STANDARD

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NORME EUROPÉENNE

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English Version

## Tanks for transport of dangerous goods - Service equipment for tanks - Flame arresters for breather devices

Citernes de transport de matières dangereuses -  
Équipement de service pour citernes - Arrête-flammes pour  
dispositifs d'aération

Tanks für die Beförderung gefährlicher Güter -  
Bedienungsausrüstung von Tanks - Flammensperren für  
Belüftungssysteme

This European Standard was approved by CEN on 20 March 2014.

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

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## Foreword

This document (EN 16522:2014) 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of an identical text or by endorsement, at the latest by October 2014 and conflicting national standards shall be withdrawn at the latest by October 2014.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

EN 16522 is part of the following series of 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 13314, *Tanks for transport of dangerous goods — Service equipment for tanks — Fill hole cover*
- EN 13317, *Tanks for transport of dangerous goods — Service equipment for tanks — Manhole cover assembly*
- EN 13922, *Tanks for transport of dangerous goods — Service equipment for tanks — Overfill prevention systems for liquid fuels*
- 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*
- EN 15208, *Tanks for transport of dangerous goods — Sealed parcel delivery systems — Working principles and interface specifications*
- CEN/TR 15120, *Tanks for transport of dangerous goods — Guidance and recommendations for loading, transport and unloading*

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, Former Yugoslav Republic of Macedonia, 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.

## **Introduction**

The flame arrester is the protection device installed to prevent the immediate passage of flame into the tank shell in accordance with the requirements of ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road) [1].

The flame arrester may be an integral part of the device described in EN 14595 or another breather device.

If the flame arrester is incorporated into a device with other functions, this incorporation will not jeopardize or modify the requirements of this European Standard.

## 1 Scope

This European Standard defines the minimum requirements for flame arresters fitted to tanks for the transport of dangerous goods.

This European Standard specifies the type of flame arrester to be used for breather devices as part of the service equipment of fixed tanks and demountable tanks for the transport of liquid petroleum products. The equipment specified by this European Standard is suitable for use with liquid petroleum products and other dangerous substances of Class 3 of ADR which have a vapour pressure not exceeding 110 kPa at 50 °C and petrol, and which have no subclassification as toxic or corrosive. It also specifies the tests necessary to verify the compliance of the equipment with this European Standard.

Emergency pressure relief valves in accordance with EN 14596 are excluded from the requirements of this European Standard.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 16852:2010, *Flame arresters — Performance requirements, test methods and limits for use (ISO 16852:2008, including Cor 1:2008 and Cor 2:2009)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 16852:2010 apply.

## 4 Function

The flame arrester shall prevent the immediate passage of flame into the tank.

## 5 General requirements

Unless otherwise stated, this European Standard shall meet the requirements of EN ISO 16852.

## 6 Requirements for different applications of flame arresters

Table 1 defines the requirements for each type of flame arrester application.

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