

Irish Standard I.S. EN 12972:2015

Tanks for transport of dangerous goods -Testing, inspection and marking of metallic tanks

© CEN 2015 No copying without NSAI permission except as permitted by copyright law.

#### I.S. EN 12972:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R.~xxx: Standard~Recommendation-recommendation~based~on~the~consensus~of~an~expert~panel~and~subject~to~public~consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on: Published:

EN 12972:2015 2015-02-18

This document was published ICS number:

under the authority of the NSAI

2015-03-07

and comes into effect on: 13.300 23.020.20

^

NOTE: If blank see CEN/CENELEC cover page

NSAI T +353 1 807 3800 Sales: 1 Swift Square, F +353 1 807 3838 T +353 1 857 6730

Northwood, Santry E standards@nsai.ie F +353 1 857 6729

Dublin 9 W NSAI.ie W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

**EUROPEAN STANDARD** 

EN 12972

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

February 2015

ICS 13.300; 23.020.20

Supersedes EN 12972:2007

#### **English Version**

# Tanks for transport of dangerous goods - Testing, inspection and marking of metallic tanks

Citernes destinées au transport des matières dangereuses -Épreuve, contrôle et marquage des citernes métalliques Tanks für die Beförderung gefährlicher Güter - Prüfung, Inspektion und Kennzeichnung von Metalltanks

This European Standard was approved by CEN on 5 December 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.

CEN members are the national standards bodies of 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 United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Cont	<b>ents</b>	age
Forewo	ord	3
Introdu	ıction	4
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4 4.1 4.2 4.3 4.4 4.5	Inspections and tests	7 9 9
4.6 5	Procedures and documentation for inspections and tests	. 12
Annex	Examination of documents  Check of the design characteristics  Inspection of the tank interior  Inspection of the tank exterior  Hydraulic pressure test  Vacuum testing  Leakproofness test  Determination of capacity  Inspection of frame or other structural equipment of portable tanks and tank containers  Dynamic longitudinal impact test  Test report, certification and marking  A (informative) Applicable items of tank inspection – Survey Table  B (informative) Hydraulic pressure testing with gases – hazards and precautions	. 12 . 16 . 18 . 19 . 23 . 24 . 26 . 27 . 27 . 28 . 28
	D (informative) Certificate of initial, periodic and intermediate inspection and exceptional check	
Annex	E (normative) Tank plates for fixed tanks (tank vehicles) and demountable tanks for the transport of dangerous goods	. 38
E.1	Tank plate	. 38
E.2	Content of the marking of the tank plate	. 39
Annex	F (normative) Tank plates for tank containers or portable tanks for the transport of dangerous goods	. 40
F.1	Tank plate for tank containers or portable tanks for the transport of dangerous liquids and solids	. 40
F.2	Tank plate for tank containers or portable tanks for the transport of gases	. 41
Bibliog	ıraphy	. 43

### **Foreword**

This document (EN 12972:2015) 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 2015 and conflicting national standards shall be withdrawn at the latest by August 2015.

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 EN 12972:2007.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

Compared with EN 12972:2007 the following fundamental changes have been made:

- a) alignment of the standard with RID 2013 [1] and ADR 2013 [2]; and
- b) updating of the normative references.

The document has been submitted for reference into the RID and/or in the technical annexes of the ADR.

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 types and frequencies of the inspections and tests as well as the responsibilities are given by the relevant regulations concerning the transport of dangerous goods.

## 1 Scope

This European Standard specifies testing, inspection and marking for the type approval, initial inspection, periodic inspection, intermediate inspection and exceptional check of metallic tanks (shell and equipment) of fixed tanks (tank vehicles), demountable tanks, rail tank wagons, portable tanks and tank containers for the transport of dangerous goods.

This European Standard is not applicable to battery-vehicles and battery-wagons comprising cylinders, tubes, pressure drums, bundles of cylinders and multiple element gas containers (MEGCs), independent of whether the elements are receptacles or tanks.

It is essential that the requirements of the applicable regulations for the transport of dangerous goods prevail in all cases over those of this 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 590, Automotive fuels - Diesel - Requirements and test methods

EN 837-1, Pressure gauges - Part 1: Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing

EN 837–2, Pressure gauges - Part 2: Selection and installation recommendations for pressure gauges

EN 837-3, Pressure gauges - Part 3: Diaphragm and capsule pressure gauges - Dimensions, metrology, requirements and testing

EN 12079-1, Offshore containers and associated lifting sets - Part 1: Offshore container - Design, manufacture and marking

EN 12266–1:2012, Industrial valves - Testing of metallic valves - Part 1: Pressure tests, test procedures and acceptance criteria - Mandatory requirements

EN ISO 3834-2, Quality requirements for fusion welding of metallic materials - Part 2: Comprehensive quality requirements (ISO 3834-2)

EN ISO 9606-1, Qualification testing of welders - Fusion welding - Part 1: Steels (ISO 9606-1)

EN ISO 9606-2, Qualification test of welders - Fusion welding - Part 2: Aluminium and aluminium alloys (ISO 9606-2)

EN ISO 9606-3, Approval testing of welders - Fusion welding - Part 3: Copper and copper alloys (ISO 9606-3)

EN ISO 9606-4, Approval testing of welders - Fusion welding - Part 4: Nickel and nickel alloys (ISO 9606-4)

EN ISO 14731, Welding coordination - Tasks and responsibilities (ISO 14731)

EN ISO 14732, Welding personnel - Qualification testing of welding operators and weld setters for mechanized and automatic welding of metallic materials (ISO 14732)

EN ISO 15607, Specification and qualification of welding procedures for metallic materials - General rules (ISO 15607)



**Product Page** 

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation