



**NSAI**  
Standards

Irish Standard  
I.S. EN 12021:2014

# Respiratory equipment - Compressed gases for breathing apparatus

**I.S. EN 12021:2014**

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

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English Version

## Respiratory equipment - Compressed gases for breathing apparatus

Appareils de protection respiratoire - Gaz comprimés pour  
appareil de protection respiratoire

Atemgeräte - Druckgase für Atemschutzgeräte

This European Standard was approved by CEN on 6 February 2014.

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## **Foreword**

This document (EN 12021:2014) has been prepared by Technical Committee CEN/TC 79 “Respiratory protective devices”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by October 2014, and conflicting national standards shall be withdrawn at the latest by October 2014.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 supersedes EN 12021:1998.

Annex B provides details of significant technical changes between this European Standard and the previous edition.

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

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.

**EN 12021:2014 (E)****1 Scope**

This European Standard specifies requirements for the quality of compressed gas supplied for mixing or use in respiratory protective devices and hyper- and hypobaric operations. Account is taken of the use of compressed gases for normal atmospheric pressure as well as for hyper- and hypobaric pressures.

This European Standard does not apply to compressed gases used for medical purposes or for aerospace applications.

**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 132:1998, *Respiratory protective devices - Definitions of terms and pictograms*

**3 Terms and definitions**

For the purposes of this document, the terms and definitions given in EN 132:1998 and the following apply.

**3.1****hydrocarbon**

organic compound consisting of hydrogen and carbon

**3.2****oil**

mixture of hydrocarbons and other organic compounds composed of six or more carbon atoms (C6+)

**3.3****trimix**

gas comprising a specified mixture of oxygen, helium and nitrogen, capable of supporting human life under appropriate diving or hyperbaric conditions

Note 1 to entry: This includes manufactured gas mixtures made up from combinations of pure oxygen, pure helium and pure nitrogen, with or without compressed air.

**3.4****heliox**

gas comprising a specified mixture of oxygen and helium, capable of supporting human life under appropriate diving or hyperbaric conditions

**3.5****oxygen and nitrogen gas mixture**

gas comprising a specified mixture of oxygen and nitrogen, capable of supporting human life under appropriate diving or hyperbaric conditions

Note 1 to entry: Oxygen and nitrogen gas mixtures are also known as "nitrox".

Note 2 to entry: This definition does not cover gas mixtures produced using oxygen compatible air or nitrogen depleted air.

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