



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 404:2005

ICS 13.340.30

**RESPIRATORY PROTECTIVE DEVICES FOR
SELF-RESCUE - FILTER SELF-RESCUER
FROM CARBON MONOXIDE WITH
MOUTHPIECE ASSEMBLY**

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
<http://www.nsai.ie>

Sales
<http://www.standards.ie>

*This Irish Standard was
published under the
authority of the National
Standards Authority of
Ireland and comes into
effect on:
June 22, 2005*

**NO COPYING WITHOUT NSAI
PERMISSION EXCEPT AS
PERMITTED BY COPYRIGHT
LAW**

© NSAI 2005

Price Code N

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 404

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2005

ICS 13.340.30

Supersedes EN 404:1993

English version

Respiratory protective devices for self-rescue - Filter self-rescuer from carbon monoxide with mouthpiece assembly

Appareils de protection respiratoire pour l'évacuation -
Auto-sauveteur avec ensemble embout buccal à filtre
monoxide de carbone

Atemschutzgeräte für Selbstrettung - Filterselbstretter mit
Mundstückgarnitur zum Schutz gegen Kohlenmonoxid

This European Standard was approved by CEN on 3 March 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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents	Page
Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Description	6
5 Classification.....	6
6 Requirements	7
6.1 General.....	7
6.2 Ergonomics	7
6.3 Design	7
6.4 Materials	7
6.5 Cleaning and disinfecting	8
6.6 Mass	8
6.7 Connections	8
6.8 Means of carrying	8
6.9 Harness	8
6.10 Handling.....	9
6.11 Leak tightness.....	9
6.12 Facepiece.....	9
6.12.1 Mouthpiece assembly	9
6.12.2 Breathing hose.....	9
6.13 Inhalation and exhalation valves.....	9
6.14 Saliva trap.....	10
6.15 Integrity of device at high carbon monoxide concentrations	10
6.16 Conditioning.....	10
6.16.1 Mechanical strength	10
6.16.2 Rough usage (optional).....	10
6.16.3 Temperature	10
6.16.4 Transport	10
6.17 Carbon dioxide content of inhalation air (dead space).....	10
6.18 Performance requirements	10
6.18.1 Minimum test duration	10
6.18.2 Carbon monoxide - breakthrough criteria.....	11
6.18.3 Temperature and humidity.....	11
6.18.4 Breathing resistance	11
6.19 Practical performance	11
7 Testing	12
7.1 General.....	12
7.2 Nominal values and tolerances	12
7.3 Visual Inspection	12
7.4 Conditioning.....	12
7.4.1 Mechanical strength test.....	12
7.4.2 Rough usage test.....	13
7.4.3 Temperature conditioning	13
7.5 Practical performance test.....	14
7.5.1 Escape test	14
7.5.2 Transport test.....	16

7.6	Laboratory test	17
7.6.1	Protection against carbon monoxide	17
7.6.2	Testing at high CO concentrations.....	18
7.6.3	Breathing resistance	18
7.6.4	Leak tightness	18
7.6.5	Materials	18
7.6.6	Insulation resistance of non-metallic carrying containers	18
7.6.7	Inhalation and exhalation valves	19
7.6.8	Carbon dioxide content of inhalation air (dead space)	19
7.6.9	Breathing hoses	19
7.6.10	Pull test and tear-off force	20
8	Marking	20
8.1	General	20
9	Information supplied by the manufacturer	21
Annex A (normative)	Methods of measurement of the insulation resistance of non-metallic carrying containers	37
A.1	Voltmeter ammeter method	37
A.2	Comparative method.....	37
Annex B (informative)	Method for the determination of wet bulb temperature of the inhaled air	40
Annex ZA (informative)	Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC Personal Protective Equipment.....	42

EN 404:2005 (E)

Foreword

This document (EN 404:2005) 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 2005, and conflicting national standards shall be withdrawn at the latest by October 2005.

This document supersedes EN 404:1993.

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 89/686 EEC.

For relationship with EU Directive 89/686 EEC, 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, 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.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-