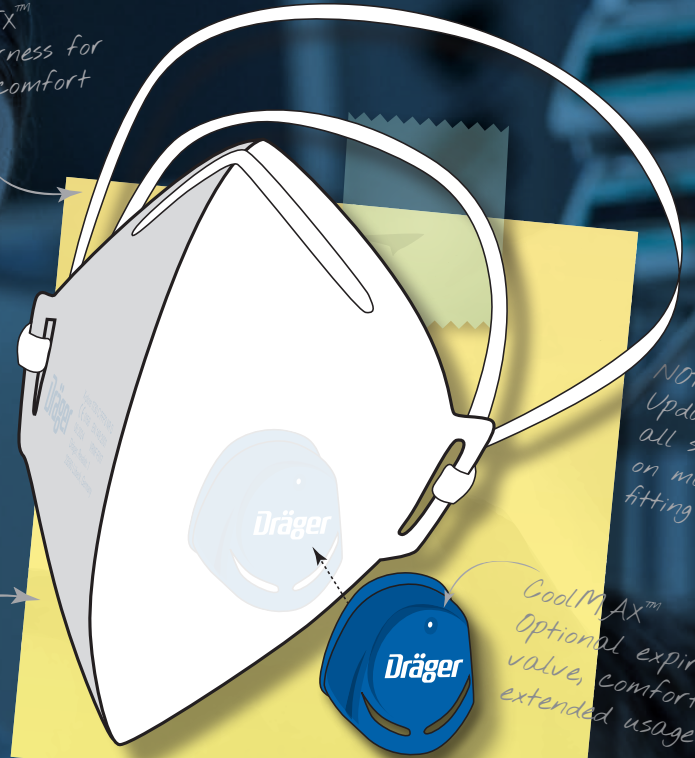


## Dräger X-plore® 1730 C FFP Range Information Pack



Proudly supplying the NHS

VarioFLEX™  
Head harness for  
all day comfort



NOTE:  
Update  
all staff  
on mask  
fitting

CoolSAFE™  
Filter material  
helps reduce  
tiredness

CoolMAX™  
Optional expiration  
valve, comfort for  
extended usage

# Contents

- 1 About Us
- 2 About the Dräger X-plore® 1730 C FFP Range
- 3 How to use your X-plore® 1730 C Mask
- 4 Fit Testing Methods
- 5 Qualitative & Quantitative Face Fit Testing Pandemic Precautions
- 6 Face Fit Tips & Tricks
- 7 Frequently Asked Questions
- 8 QR Codes + Useful Links
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## Important note

This booklet does not replace the instructions for use. Prior to using the mask, the corresponding instructions for use must always be read and understood. Additional notes on the use against infectious germs and biologically harmful substances must always be observed.

Dräger would like to thank the team at the NHSSC, Department of Health & RPE2Fit for their invaluable contribution to this information pack.

SECTION 1  
About Us

## Dräger in numbers:

**1889**   
Founded in  
Lubeck, Germany in 1889

**5**   
Fifth generation as a  
family run business

**+40**   
Over 40 years education  
and training experience\*

**613**   
UK and ROI  
employees

**+14,000**  
More than 14,000  
employees worldwide

**+180**   
Present in more  
than 180 countries

**263**   
million euros for  
research and  
development\*\*

**+266**   
registered  
patents\*\*

## You may already know us.

“Technology for Life” is our guiding philosophy here at Dräger. Whether in the hospital, healthcare community or industry, our products protect, support and save lives.

## Dräger in the hospital.

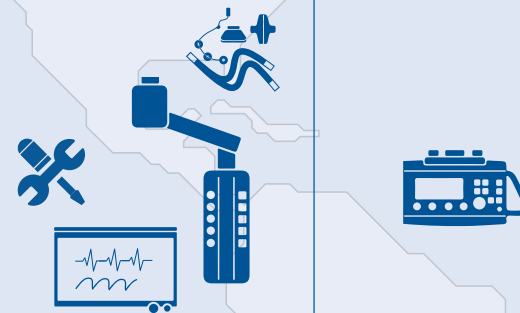
As Your Specialist in Acute Care, we offer our customers anaesthesia workstations, medical ventilation, patient monitoring as well as neonatal care devices for premature babies and newborns. With ceiling supply units, IT solutions for the operating theatres, a service network including 70 field based engineers in the UK and ROI and an academy centre of excellence, we are at your side throughout the entire hospital.

## Dräger in industry.

Emergency response services, law and regulatory enforcement and industry trust in our integrated hazard management, in particular for personal protection and plant safety. This includes: respiratory protection equipment, fixed and portable gas detection systems, as well as alcohol and drug impairment detection. In collaboration with our customers we also develop customised solutions, such as entire fire training systems, training concepts and workshops.

## Our Production Sites.

### Dräger products in the hospital:



#### Hospital Wide

Accessories and Consumables  
Medical Infrastructure  
Patient Monitoring  
Dräger Services

#### A&E

Emergency Ventilation

#### Critical Care

Ventilation & Lung Imaging  
Clinical Information Systems

#### Operating Theatre

Anaesthesia Machines  
Surgical Lights

#### Neonatal Care

Ventilation  
Incubators  
Jaundice Management

 *Your mask is made here!*



**“Everything we do, we do with passion – and we do it for life.”**

Stefan Dräger, Executive Board Chairman

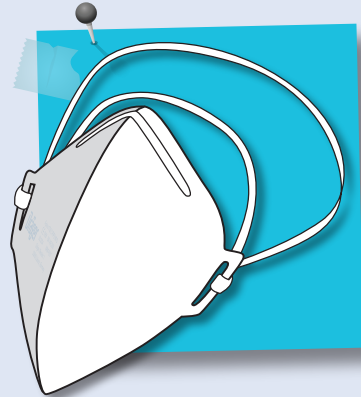
\*UK and ROI only. \*\*Accurate as of 2019



SECTION 2  
About the  
Dräger X-plore® 1730 C  
Range

## Introducing the Dräger X-plore® 1730 C FFP Range

Designed to make breathing easy and comfortable, the Dräger X-plore 1730 C CoolSAFE filter material technology cleverly combines low breathing resistance and high filter performance in one mask. In addition, the X-plore 1730 C V incorporates a CoolMAX valve, which efficiently releases humid and warm exhaled air to keep you cool and breathing easily.



**VarioFLEX™**  
Head Harness

This latex-free continuous loop head harness allows you to don and doff your mask easily whilst sitting comfortably and pressure-free. The soft, tear-proof elastic easily stretches to fit various head sizes and prevents hair entanglement.



**CoolMAX™**  
Exhalation Valve\*

The CoolMax exhalation valve, available on the X-plore 1730 C V only, helps you to breathe easily during your shift by guiding warm humid air out from the mask whilst helping to reduce breathing resistance.



**CoolSAFE™**  
Filter Material

This high performance filter material helps to keep you protected whilst offering low breathing resistance to reduce tiredness.

*Breathe cool,  
stay safe.*

\*Dräger X-plore 1730 C V only

## Getting to know your mask

**Dräger X-plore® 1730 C**

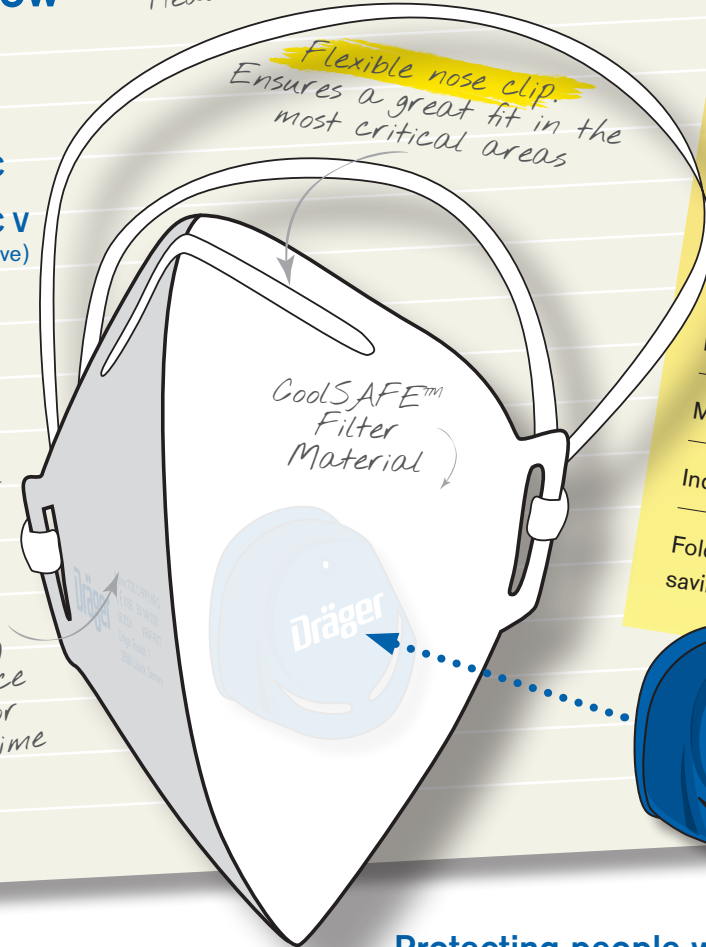
**Dräger X-plore® 1730 C V**  
(with CoolMAX exhalation valve)

*Soft Inner Layer.*  
The inner material soft layer is not only soft and hypoallergenic, but also repels moisture thanks to its hydrophobic properties, keeping breathing resistance low when used for longer periods of time

*VarioFLEX™  
Head Harness*

*Flexible nose clip.*  
Ensures a great fit in the most critical areas

*CoolSAFE™  
Filter Material*



*About your mask*

Offers FFP3 classification which means 99% of particles are filtered out

EN Protection: EN149:2001

Latex free

Made in Britain

Individual packaging for hygiene

Folded for easier transporting and saving space when stored



*CoolMAX™  
Exhalation Valve for  
the X-plore 1730 C V  
mask version*

Protecting people worldwide since 2002



SECTION 3  
 How to use your  
 Dräger X-plore 1730 C  
 Mask

# Wearing your X-plore® 1730 C Mask Range

**Note:**  
You must have had a fit test prior to wearing your mask!  
(See page 16 for more info)

Upper strap should be placed on the crown of the head

Straps should not be twisted or crossed over

Lower strap should be placed below the ears at the nape of the neck

If you have long hair, it should be tied in a position that does not interfere with the headstraps

Glasses positioned on top of the mask

**Important note!**  
Make sure the noseclip has a smooth fit around the nose and there are no gaps.



## Donning



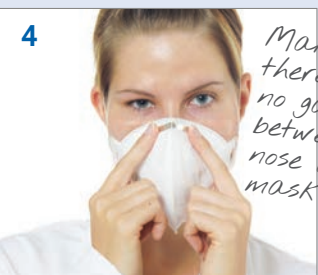
1 Hold the mask in your hand with the head straps hanging down.



2 Position the mask under your chin and over your nose. Slip the first strap over your head to the nape of your neck.



3 Pull the upper strap into position at the crown of your head, ensure the strap sits above your ears.



4 Adjust the nose clip to minimise leakage.



5 Cover the mask with both hands and exhale. The mask should inflate slightly. If any air escapes at the sides of the mask, readjust the mask until it fits properly and ensure that the nose clip is positioned correctly on your nose.



6 Ready for use.

**TIP:**  
Don the mask before positioning glasses or goggles.



Scan to watch our donning video

**NOTE:**  
Fitted perfectly

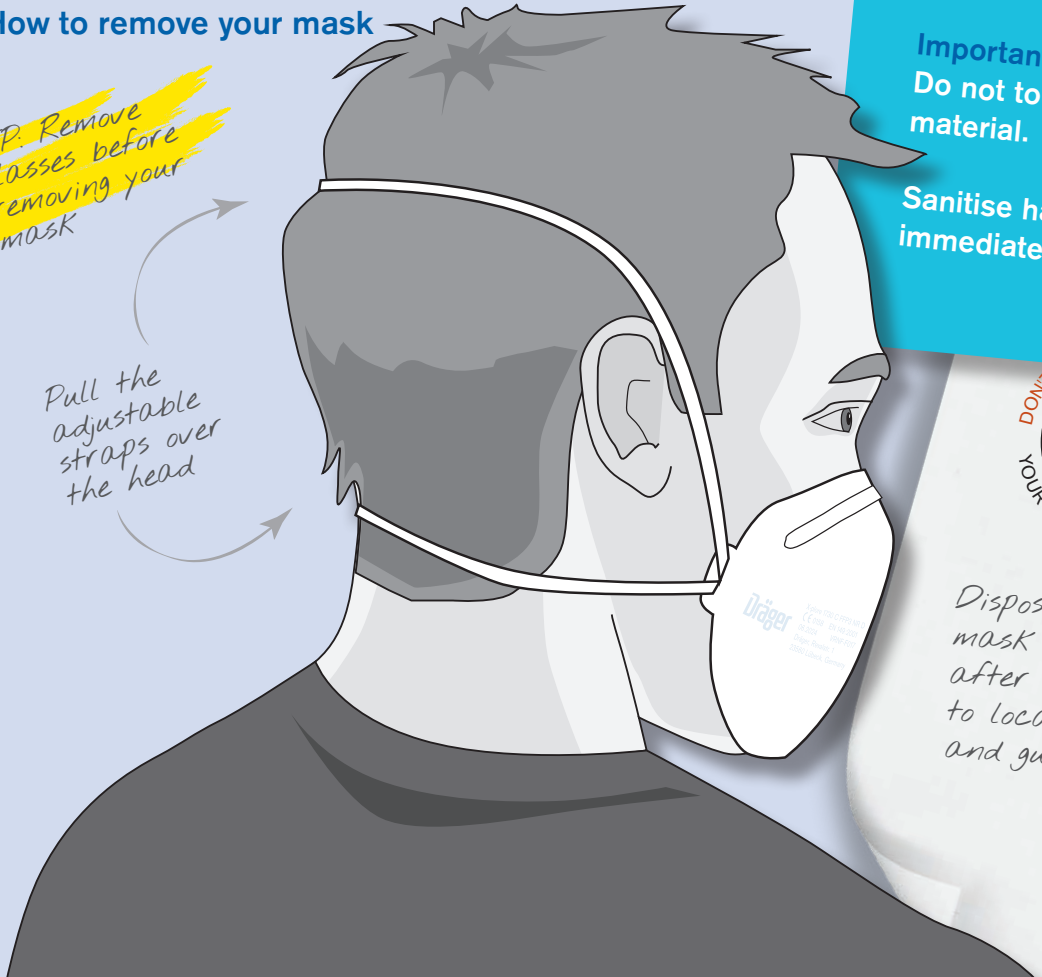


## Doffing

How to remove your mask

*TIP: Remove glasses before removing your mask*

*Pull the adjustable straps over the head*



**Important!**  
Do not touch filter material.  
Sanitise hands immediately after doffing.



*Dispose of your mask immediately after use according to local requirements and guidelines.*

SECTION 4  
Face Fit  
Testing Methods



## Why Fit Test?

When it comes to respiratory protection equipment, the wearer's health is top priority. Whilst Dräger masks offer effective protection against particles in the ambient air, it is important to note that only an appropriately fitting mask can provide a high level of protection. Users may have false sense of security when wearing inappropriate or poor fitting respiratory equipment, which could result in severe implications for the user's health.

The performance of a tight fitting mask depends on achieving a good contact between the wearer's skin and face seal of the mask. Inadequate fit will significantly reduce the protection provided to the wearer. Any reduction in protection can put the wearer's life or health in danger.

A fit test is therefore required to ensure the mask fits the wearer's face properly, provides a good seal and that the user knows how to correctly don the mask.

## When To Fit Test?

If tight fitting RPE masks are provided to employees it is essential that documentary evidence to show that the mask fits the wearer effectively is provided. By ensuring each wearer of masks has a face fit test, you can be sure that your organisation is fulfilling the requirements laid out in the Health & Safety Executive (HSE) guidance note HSE INDG 479 and HSG53.

Additionally, any major changes such as;

- Mask type, size, model and material,
- Any weight changes, substantial dental work, facial changes, facial piercings, scarring, broken nose, mole within the seal of the mask or new head worn PPE such as ear defenders and eyewear will require a new fit test.

### Note:

The Dräger X-plore 1730 C range of masks are FFPs (Filtering Face Pieces) which are included within the term 'respirators'.

## Face Fit Testing Methods Overview

### Qualitative Fit Testing

A qualitative fit test checks the fit of a mask using a test substance that the subject can taste. The test involves using a variety of different movements to simulate the working environment as closely as possible.

### Quantitative Fit Testing

A quantitative fit test delivers more objective results, which can be accurately measured by using an ambient particle counter to measure the number of particles in the mask interior compared to the particles in the ambient air (ie outside the mask), or by using a controlled negative pressure inside the mask to measure leakage.





# SECTION 5

Qualitative &  
Quantitative  
Face Fit Testing  
Pandemic Precautions

## General Guidance on Fit Testing during a Pandemic

- Current government social distancing protocols should be followed. Observations can be made from a distance and instructions can be delivered verbally.
- Both the fit tester and person being tested should sanitise their hands before and after the test.
- Mask should be kept on until safe to remove to minimise risk to the tester.
- Disposable masks MUST not be used by more than one individual and must be disposed of appropriately after the test.
- When cleaning the equipment (e.g. tubes, hoods etc) fit testers should wear the relevant PPE. Once finished, PPE should be removed and disposed of according to local guidelines.

### Removing the mask used for Fit Testing

- The removal of the FFP must be carried out by the wearer.
- Remove the mask by holding the straps at either side and move the mask away from the face prior to taking it off over the head.
- The mask must be disposed of according to local guidelines as it will no longer be suitable for personal protection.

*TIP! Avoid touching your face, eyes and mouth when removing the mask and do not touch the filter material at anytime.*



### Qualitative Fit Testing Pandemic Precautions for Disposable FFPs

#### Before the test

- Ensure that only the recommended volume of 5ml of the solutions are poured into the nebuliser saucers before each test.
- Design the fit test procedure to keep the time in the fit test room as short as possible. The room needs to be large and well ventilated.
- Ensure packaging is only opened immediately prior to the fit test.

#### During the test

- Local social distancing guidelines should be observed at all times.

#### Disinfecting after test (per test)

- Once normal cleaning of equipment has been completed, ensure all parts of the fit testing kit that has the potential to be contaminated via exhaled breath has been thoroughly disinfected.
- Using an appropriate cleaning disinfectant, wipe both the inside and outside of the fit testing hood to disinfect. Leave the hood to dry in a safe place and allow enough contact time to maximise effectiveness of the disinfectant.
- Ensure the outlet of the nebuliser (which is positioned inside the aperture of the fit testing hood during tests) is disinfected after each person. To disinfect the nebuliser, submerge it in a disinfectant solution of the correct strength, allow sufficient contact time to ensure adequate disinfection.
- Any remaining test solution in the saucer at the end of each test should be disposed of safely.

Some content on this page is based on HSE Guidance. For more information, visit [www.hse.gov.uk](http://www.hse.gov.uk)

## Quantitative Fit Testing Pandemic Precautions on Disposable FFPs

### Before the test

- Ensure that any packing is only opened immediately prior to the fit test.

### Disinfecting after the test

- Thoroughly clean and disinfect the ambient particle counting device tubing with a suitable surface cleaning disinfectant wipe after every use. Allow tubes to dry fully before use.
- Ensure probing tools and push nuts are cleaned thoroughly with a suitable surface cleaning disinfectant wipe after each test.
- Provide a suitable surface cleaning disinfectant wipe to the person fit tested and show them how to clean the fit testing adaptors and sampling probe. Ensure they clean it well by providing them with clear instruction and supervising them.

*TIP: Look to have a stock of spare tubes available to allow new tubes to be used per person.*

# SECTION 6

## Face Fit Tips & Tricks

## Fit testing tips

### Check the factors that affect a good fit

- Ensure the combined weight of the fit test adapter, sample probe and sample tubes are not interfering with the fit of the mask.
- Is the mask in good condition (face seal, valves, damage etc.)?
- Are you using appropriate adapters or filters for the type of test?



## Actions to take in the event of a failed test

### Qualitative Fit Test

1. Remove the hood and inspect the seal of the mask using correct social distancing to the best of your ability.
2. If any obvious causes are clear, inform the wearer and instruct them on how to correct.
3. Inform them to carry out a fit check and retest the wearer, following the correct retesting procedures.
4. If the wearer fails a second test, find another mask type/size and carry out a retest using correct donning procedures and retesting procedures.

### Quantitative Fit Test

1. Inspect the seal of the mask using correct social distancing to the best of your ability.
2. If any obvious causes are clear, inform the wearer and instruct them on how to correct.
3. Switch the machine to "Real Time" and ask the wearer to perform the exercise they failed on. If the mask still fails, ask the wearer to slacken/tighten the straps and/or move the mask up and down on the face to establish where the wearer obtains the best fit.
4. If it appears to fit better in a different position, ask the wearer to remove the mask and do it themselves following your instruction and carry out a retest. Do not carry out a test unless they are able to illustrate to you that they can fit the mask correctly themselves.

## What can go wrong, and what can we do about it?

### Qualitative

#### 1. Nebuliser failing to spray a mist

- Check that the 'question mark' is sufficiently pushed down and working
- Check for a blockage

#### 2. Nebuliser is leaking

- Make sure that the correct amount of solution has been poured
- Ensure the black O ring isn't damaged

#### 3. Wearer has a low or no sense of smell

- Lack or no sense of smell can affect the wearer's taste  
Test with Quantitative method

#### 4. Wearer suffers from Claustrophobia

- Test with Quantitative Fit Test Method

#### 5. Wearer has a respiratory infection

- Qualitative is not an option. Quantitative may be an option, depending on the severity of the infection

#### 6. Wearer fails the 'break the seal' test

- The test is deemed as a fail and a re-test will need to be completed, using the correct re-test procedures

### Quantitative

#### 1. The particle concentration in the ambient air is too low

- Make sure the wick is sufficiently coated with Isopropyl alcohol
- Use a particle generator to increase the particles in the ambient air

#### 2. The particle concentration in the ambient air is too high

- Open windows and doors

#### 3. The ambient particle counter machine cannot detect an ambient

- Check that there are no bends or twists in the tubing
- Ensure that the blue and silver connections are sufficiently tightened
- Ensure that the wick is inserted and appropriately coated with Isopropyl alcohol

#### 4. The computer cannot detect the PortaCount

- Ensure connections are working
- Exit the application and re-enter

#### 5. The daily checks have failed

- Exit daily check application
- Ensure all parts of the ambient particle counter machine are in the correct place and in full working order
- Ensure there are no damaged components
- Change the tubing

#### 6. The wick is drying out too quickly

- Remove and leave to dry before coating with Isopropyl alcohol again
- Replace with an alternative wick



INDEX

SECTION 7  
Frequently Asked  
Questions

## Frequently Asked Questions (FAQs)

### What is the difference between a Fit Test and a Fit Check?

A fit test will measure the fit of the mask during exercises using test agents and/or a machine, whereas the fit check is a quick seal check to ensure that the mask is properly donned prior to every use. A fit check does not replace a fit test.

### What is the difference between a Quantitative and Qualitative fit test?

A qualitative fit test is a pass/fail based on whether the wearer can taste the test substance used. A quantitative fit test delivers more objective results by using an ambient particle counter to measure the leakage of the mask. Both methods are approved so you must choose the method that is appropriate for the wearer and mask being used.

### When should I repeat a face fit test?

According to the Health and Safety Executive, a fit test should be carried out before the user wears the mask for the first time. In addition, a fit test should be repeated under the following conditions:

- Whenever there is a change to the mask type, size, model or material
- Weight gain or loss
- Substantial dental work
- Any facial changes (scars, moles, effects of aging etc.) around the face seal area
- Facial piercings
- Introduction or change in other head-worn PPE, for example goggles.

### Does the Dräger X-plore 1730 C FFP mask range need to be tested?

Yes. The Dräger X-plore 1730 C range of masks are disposable FFPs and are classified as tight fitting masks and therefore should be tested as such.

### What requires a fit test?

If your mask is required to seal to your skin, then it needs to be fit tested.

### How does wearing a filtering face piece protect me?

A filtering face piece (FFP) is made up from several layers of materials designed to filter out minute particulates from the air. A mask, when worn correctly, filters out particulates (solid, liquid or both) from the air passing through it. This prevents potentially harmful particles from entering our respiratory tracts through our nose or mouth.

### What is the FFP classification of a Dräger X-plore 1730 range?

The Dräger X-plore 1730 C and Dräger X-plore 1730 C V have an EN protection class FFP3 in accordance with EN 149:2001. The protection class indicates how efficient the mask is at filtering particles.

**Class 1 (FFP1): 80.00%**

**Class 2 (FFP2): 94.00%**

**Class 3 (FFP3): 99.00%**

### Do I need to be clean shaven?

Yes. You need to be completely shaven. Any stubble or facial hair will result in a fit test not being able to be taken as facial hair can interfere with the seal of the mask.

### What is the shelf life of the Dräger X-plore 1730 C range?

You can find the individual expiry date on the mask and storage requirements located on the mask packaging. You must dispose of your Dräger X-plore 1730 mask after the expiry date has passed or if there is any damage.

### Why is there a valve on the X-plore 1730 C V?

Some masks are fitted with exhalation valves that permit one-way flow of the exhaled air to outside the mask. This reduces the humidity build-up inside the mask and makes it more comfortable for the user.

### Can I re-use or clean my Dräger X-plore 1730?

No. The Dräger X-plore 1730 is a single use disposable mask and must be disposed of in accordance with local waste disposal regulations.





SECTION 8  
QR Codes +  
Useful Links

## Useful Links

### More information from Dräger

#### Dräger's Important Information during the Novel Coronavirus Outbreak

From FAQs to handling and reprocessing of Dräger medical and safety equipment, this page provides customers with invaluable content from Dräger during the coronavirus outbreak.

[www.draeger.com/en\\_uk/Home/Coronavirus-COVID-19](http://www.draeger.com/en_uk/Home/Coronavirus-COVID-19)

#### Dräger's World of Respiratory Protection

Everything you need to know about respiratory protection in one place.

[www.draeger.com/en\\_uk/Safety/Respiratory-Protection](http://www.draeger.com/en_uk/Safety/Respiratory-Protection)

#### Useful Product Videos

Donning Video: [www.youtube.com/watch?v=yH\\_OWkH7WRk](https://www.youtube.com/watch?v=yH_OWkH7WRk)

#### External Advice and Content

HSE (Health and Safety Executive)

Using PPE at work during the coronavirus outbreak

Content related to using disposable respirators, fitting respirators and more

[www.hse.gov.uk/coronavirus/ppe-face-masks/index.htm](http://www.hse.gov.uk/coronavirus/ppe-face-masks/index.htm)

#### Fit testing face masks during the coronavirus pandemic

Information on fit testing face masks to avoid transmission during the coronavirus pandemic

[www.hse.gov.uk/coronavirus/ppe-face-masks/face-mask-ppe-rpe.htm](http://www.hse.gov.uk/coronavirus/ppe-face-masks/face-mask-ppe-rpe.htm)

#### Use of face masks designated KN95

Safety alert on KN95 designated masks

[www.hse.gov.uk/safetybulletins/use-of-face-masks-designated-kn95.htm](http://www.hse.gov.uk/safetybulletins/use-of-face-masks-designated-kn95.htm)

#### Fit2Fit

For further advice on the practical aspect of Face Fit Testing

<https://www.fit2fit.org>

#### Local Coronavirus Guidance

[www.england.nhs.uk/coronavirus/](http://www.england.nhs.uk/coronavirus/)

[www.gov.scot/collections/coronavirus-covid-19-guidance/](http://www.gov.scot/collections/coronavirus-covid-19-guidance/)

[www.gov.wales/health-professionals-coronavirus](http://www.gov.wales/health-professionals-coronavirus)

[www.gov.ie/en/campaigns/c36c85-covid-19-coronavirus/](http://www.gov.ie/en/campaigns/c36c85-covid-19-coronavirus/)

SECTION 9  
More Solutions  
By Dräger

## Face Fit Testing

In order for RPE to provide adequate protection for each individual, it is imperative that it does not leak. One of the main reasons that a tight-fitting mask will leak is due to poor fitting. Since everyone is unique and has different sizes and shapes of face, it is reasonable to say that not one size or type of RPE will fit everyone in your workforce.

Dräger are proud to be working alongside RPE2Fit who offer unbiased, professional guidance in the correct selection of your RPE requirements. This will save you time, money and ease the pain of selection. Ensure your workforce is properly protected!

### About RPE2Fit

It is important that a competent, trained and qualified Face Fit Tester be selected. We are BSIF (British Safety Industry Federation) and Fit2Fit Accredited in both Qualitative and Quantitative methods and are dedicated to delivering quality RPE guidance in selection and training and testing in both types of Face Fit Testing.

Should you require Face Fit testing to be carried out or you would like support when carrying out your own Face Fit testing, please contact RPE2Fit or call 07884 498709 quoting Dräger2021 for preferential rates.



For more information please visit  
[www.rpe2fit.com](http://www.rpe2fit.com)



## Your safety is our priority

Find out more about our personal protective equipment (PPE) portfolio.



### Protective clothing

Our reusable or disposable suits can also be worn with other Dräger PPE equipment such as full facemasks and cooling vests.



### Powered Air Purifying Respirators (PAPR)

Our PAPR units are battery operated devices filtering ambient air into the headpiece with virtually no breathing resistance. These respirators are ideal for long time periods usage.



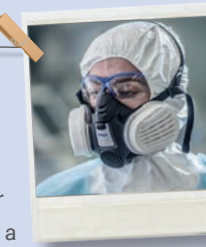
### Self-contained breathing apparatuses (SCBA)

Our light compressed-air breathing apparatuses are suitable for short periods of use and as a rescue device in emergencies where hazardous substances or low oxygen levels exist.



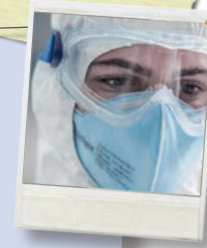
### Airline and compressed air systems

Supplying the wearer with breathing air via a pressurised air system connected by a hose for long-term use.



### Masks and filters

Our face and breathing protection range includes half face and full face masks, plus a range of interchangeable filters for all applications.



### Safety eyewear

Providing protection from particle matter to vapours. Some models can be worn over your own glasses.



# SECTION 10

## Contact Us

**Our team is ready to help.**

Whether you have a question about how to use our masks, wearing our masks or would just like to know more about us, our team are ready to help!

 01670 352 891

 [nqrs@draeger.com](mailto:nqrs@draeger.com)

 [www.draeger.com](http://www.draeger.com)

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[www.draeger.com/contact](http://www.draeger.com/contact)



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