

## Using Emollients with oxygen

Recent alerts from MHRA have highlighted the fire risk posed by emollients and other skin products. These can soak into bedding, clothing and dressings which then become easy to ignite. The resulting fire can spread quickly and reach higher temperatures. This warning applies to both paraffin based and non paraffin products.

The risk appears to be increased where products are used frequently and liberally as is the case with most emollients. Further information can be found here

<https://www.gov.uk/guidance/safe-use-of-emollient-skin-creams-to-treat-dry-skin-conditions>

Medical oxygen is non-flammable but it strongly supports combustion (including some materials that do not normally burn in air). It is highly dangerous in the presence of oils, greases, tarry substances and many plastics due to the risk of spontaneous combustion with high pressure gases.

<https://www.hse.gov.uk/pubns/indg459.pdf>

Oxygen can also be retained in clothing or the atmosphere increasing the risk of fire ([Baywater health information](#))

However, many patients do require topical preparations for skin problems and many of these are only available with an oil base.

### Minimising the risk

- Oil free preparations should be used where there will be direct contact with oxygen, for example, on the face including nasal passages and lips, due to the risk associated with high pressure gases and oil based products. Paraffin based products can also block nasal prongs as well as being a fire risk.
- For other areas using the least greasy preparation available may be helpful. Lotions and creams tend to be less greasy than ointments.
- Paraffin free products do not remove the fire risk associated with the absorption of the emollient on to clothing and bedding. There is no information on whether or not they reduce the separate risk associated with oil or grease coming into contact with medical oxygen. Paraffin free choices are available if clinically appropriate for the patient, but patients or carers must still follow the safety advice.
- Advise the patient to use the least amount possible to meet the need and for the shortest time possible.
- **Always provide safety advice** (see page 3) and record that you have done so.



For patients who smoke, provide smoking cessation advice including links to local support services. If patient is unwilling to stop smoking review the risk/benefits of both oxygen supply and emollient use.

### Formulary water based lubricant

Product	Use	Cost *
AquaGel (Oil free)	To relieve dryness of nose and lips and skin on the face when the person is using oxygen.	£1.83/82g

### Formulary paraffin free products

Aproderm Colloidal Oat Cream Paraffin free (Contains Olive oil, apricot kernel oil)	For use as emollient if paraffin free is required. Not to be used on skin in contact with oxygen.	£5.80 for 500ml;
Epimax <b>paraffin free</b> ointment (Contains castor oil)	Use only if more intensive emollient required and paraffin free is needed. More greasy than creams. Not to be used on skin in contact with oxygen	£4.99/500g
Nutraplus® 10% urea cream (contains mineral oil)	For dry, scaling and itchy skin Not for skin in contact with oxygen.	£4.37/100g

\*prices from [Dm+D browser](#) checked May 2021

NOTE: KY jelly (Kynect) is not available on FP10

Document consultation: Respiratory specialist nursing teams from Friarage Hospital; Clementhorpe Health Centre, York; Harrogate and District NHS Foundation Trust Community Respiratory Services Humber Teaching NHS Foundation Trust;

Further information is available from PrescQipp [Emollients, paraffin content and risk of fire](#)

## Oxygen Safety information for patients

Always read the information that comes with the equipment. The oxygen supplier can also provide further advice on general oxygen safety.

- Do not smoke or allow others to smoke near you.
- Do not use or store oxygen near naked flames such as candles, gas hobs, gas or open fires or similar. Check the information that came with the equipment for recommended distances from heat sources.
- Do switch off the oxygen when not in use
- Do make sure that the room is well ventilated.

### Additional Safety advice when using cream/ointments with oxygen.

- Do not use cream/ointments underneath an oxygen mask or around the nasal cannula or on areas of the skin in contact with oxygen including your hands. Use a water based lubricant.
- If you do need to use a cream or ointment on other areas use the minimum possible and rub in well.
- Do not use oil based make up.
- Do not handle oxygen equipment with greasy hands. Wash hands thoroughly before handling oxygen.
- Do not allow any oxygen equipment or oxygen including mask or nasal cannula to come into contact with the cream/ointment.
- Do not use cream/ointments to lubricate oxygen equipment. Only ever use products specifically provided or advised by the oxygen company on oxygen equipment.
- Do wash bedding and clothes regularly to reduce the build up of cream/ointment. Wash at the highest temperature that the material will allow. For example, wash bedding at 60°C.
- Do protect soft furnishing from contact with creams and ointments.

**If you have been prescribed a paraffin free product you must still follow the safety advice**

Smoking cessation support is available from your local council.

**North Yorkshire County Council** – Living Well Smoke Free Team

<https://www.northyorks.gov.uk/stopping-smoking>

Telephone: 01609797272 Email: stop.smoking@northyorks.gov.uk

**City of York Council** - City of York Health Trainers <https://www.york.gov.uk/CYHealthTrainers>

Telephone: 01904 553377 Email: cyhealthtrainers@york.gov.uk