Fire Hazards associated with Paraffin based skin products

Patients who require large quantities of emollient (100g or more) should use a water based product (e.g. cream or lotion) rather than a paraffin based one (e.g. ointment) to reduce the fire risk.

The following products have a low paraffin content and are preferred in patients at risk of fire hazards. To view the full WCCG emollient guideline click here.

Preparations with low paraffin content

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Paraffin content</th>
<th>Total</th>
<th>Cost (500g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epimax</td>
<td>white soft paraffin 15% w/w and liquid paraffin 6% w/w</td>
<td>21%</td>
<td>£2.49</td>
</tr>
<tr>
<td>Aquamax cream</td>
<td>light liquid paraffin 8% white soft paraffin 20%</td>
<td>28%</td>
<td>£3.99</td>
</tr>
<tr>
<td>Zerocream</td>
<td>liquid paraffin 12.6% white soft paraffin 14.5%</td>
<td>27.10%</td>
<td>£4.08</td>
</tr>
<tr>
<td>E45 lotion</td>
<td>light liquid paraffin 4% white soft paraffin 10%</td>
<td>14%</td>
<td>£4.59</td>
</tr>
<tr>
<td>E45 cream</td>
<td>light liquid paraffin 12.6% white soft paraffin 14.5%</td>
<td>27.10%</td>
<td>£5.99</td>
</tr>
</tbody>
</table>

Note: Most creams and lotions contain some paraffin and pose a potential fire risk.

All patients/carers and their families should be warned regarding the following risks:

- Patients treated with skin ointments and other skin products containing paraffin must be made aware of the potential fire risks associated with these products.
- The risk of fire should be considered when using large quantities of any paraffin-based emollient (e.g. application of 100g or more at once or over a short period of time).
- Bedding and clothing should be washed regularly to minimise the build-up of impregnated paraffin.
- Patients should be told to keep away from open or gas fires or hobs and naked flames, including candles, etc. and not to smoke when using these paraffin containing preparations.
- The risk is increased when these products are applied to large areas of the body and when clothing, bedding or bandages become soaked with these skin products. These products may cause clothing, bedding or bandages to catch fire. The risk also applies if the patient is near to others who are smoking or using a naked flame.

Avoid the following in patients who smoke or may be near naked flames:

The following commonly prescribed products contain white soft paraffin (WSP) at concentrations of 50% or more:
- Diprobase Ointment
- Emulsifying Ointment
- Liquid Paraffin 50% / White Soft Paraffin 50% Ointment incl. brands e.g. Emmolin Emollient Aerosol Spray
- White Soft Paraffin
- Zinc And Salicylic Acid Paste BP
- Zinc Ointment BP

The NPSA guidance also applies to these other high risk products:
- Dithranol Ointment
- Epaderm
- Hydromol Ointment
- Imuderm Liquid
- Infaderm Therapeutic Oil
- Paraffin may be a constituent in ‘specials’

NB: These lists are not exhaustive and practitioners should make a professional judgement and risk assess whether the guidance should apply to other products.

References: