

Selecting Emollient Therapy Information Sheet for Primary Care

Emollients are suitable for prescribing in skin conditions such as eczema or psoriasis, and in the elderly where skin integrity is compromised due to a reduction in the production of natural moisturisers, or other medical conditions that may lead to dry skin. There is no evidence from controlled trials that supports the use of one emollient over another therefore selection is based on the known physiological properties of emollients, patient acceptability, dryness of the skin, area of skin involved and lowest acquisition cost¹. Emollients can be **purchased over the counter** by patients who do **not** have a **diagnosed dermatological** condition or patients **not considered** to be at risk of **impaired tissue integrity**.

Key points to consider before prescribing:

- Assess patient to differentiate between dry skin and diagnosed dermatological conditions.
- Patient acceptability needs to be paramount, a product can only be cost-effective if the patient actually uses it.
- If only a small quantity is required (e.g. trial or only small area affected) it may be cheaper to get OTC preparation rather than pay prescription charge.
- Emollients may have an anti-inflammatory action and a steroid sparing effect. Therefore use **during and after 'flare-ups'**
- Greasy products i.e. **ointments** offer best emollient effect, but **creams** are often more cosmetically acceptable particularly on exposed areas e.g. the face.
- Creams** are more likely to contain antibacterial preservatives or other potential sensitizers.
- Lotions** are good for mildly dry skin, hairy area of skin, face or weeping eczema; normally contain preservatives so may cause skin irritation.
- Use of **pump dispensers** may reduce microbial contamination, may be useful in patients with recurrent infections.
- Emollients containing **urea, antimicrobials** etc. are not generally recommended as the evidence to support their use is limited¹; however they may be useful in a select group of patients. Preparations containing urea may have added benefit in patients with extremely dry skin as it attracts water & aids hydration of the skin, however can have unpleasant odour and sting on application.
- Once opened, emollients can continue to be used **up to their expiry date**, specified on the container unless the manufacturer has advised otherwise- this also **applies to care homes**
- Colloidal oatmeal** containing emollients are borderline substances & may only be prescribed in accordance with the advice of the Advisory Committee on Borderline Substances (ACBS) for the clinical conditions listed (see current BNF).
- The value of **bath additives** has been questioned - irritation or allergic contact dermatitis has occasionally been associated with use of bath emollients containing antimicrobials. Bath additives can make baths slippery, which may lead to accidents. They can also leave a greasy film in the bath, making it more difficult to clean⁶. Patients should be advised to wash with their normal emollients / emulsifying ointment/ aqueous cream as a soap substitute instead. Emollients applied directly to the skin (not bath additives) are the main stay of managing eczema and psoriasis, as this is more cost effective and provides better moisturisation. There may be a **limited** place for bath additives where patients are not able to comply with directly applying an emollient e.g. babies and young children. Bath additives typically require 10-20 minutes contact to be absorbed onto the skin and be effective^{6,7}.

Cautions:

- Paraffin-based emollients** are highly flammable, advise patient of risks and the need to exercise caution near open flames or other potential sources of ignition⁴ (offer smoking cessation to smokers before commencing paraffin based emollient therapy).
- Emollient use in baths and showers can make surfaces **slippery**, advice use of bath mats and consider risk-benefit in the elderly with increased risk of falls.
- Aqueous cream** is no longer considered suitable as a leave-on emollient for diagnosed dermatological conditions due to its tendency to cause irritant reactions and availability of emollient creams with a lower acquisition cost⁵.

Suitable Quantities:

- For diagnosed dermatological conditions, frequent & liberal application is required for optimal effect. **Ensure sufficient quantities** are prescribed to aid compliance (full body twice daily application will require a minimum of **500g per week in an adult or 250g in a child**²)

***** Non-proprietary preparations and the branded generic Zeroderma® product range represent the most cost effective choices and should be considered first-line in all new patients and in existing patients where acceptable to patients *****

Affected Area	Creams and Ointments	Lotions
Face	15-30g	100ml
Both Hands	25-50g	200ml
Scalp	50-100g	200ml
Both arms and both legs	100-200g	200ml
Trunk	400g	500ml
Groins and genitalia	15-25g	100ml

The table outlines recommended **weekly** quantities for an adult using **twice daily** applications³

Emollient Preparations Prescribing Guide

Green indicates 1 st line options		Amber –prescribe only where 1 st line option unsuitable		red prescribed only in restricted conditions	
NON-PROPRIETARY EMOLLIENT PREPARATIONS		Basic NHS Price*	Potential Sensitizers	Consistency	Contains Paraffin
Emulsifying ointment BP (100g; 500g)		£2.04	Cetostearyl alcohol	Greasy	<input checked="" type="checkbox"/>
Hydrous Ointment (100g; 500g)		£4.89	None Listed	Medium Rich Cream	
Liquid and White Soft Paraffin Ointment (Fifty:50) (250g; 500g)		£3.66	None Listed	Greasy	<input checked="" type="checkbox"/>
White Soft Paraffin BP (500g)		£4.45	None Listed	Very Greasy	<input checked="" type="checkbox"/>
BRANDED GENERIC EMOLLIENT PREPARATIONS		Basic NHS Price*	Potential Sensitizers	Consistency	Contains Paraffin
Aquamax (100g; 500g) (liquid paraffin 8%, white soft paraffin 20%, phenoxyethanol 1%)		£3.99	Cetostearyl alcohol, polysorbate 60	Light Cream	<input checked="" type="checkbox"/>
Cetraben Cream (150g; 500g [†] ; 1050g) (White soft paraffin 13.2%, light liquid paraffin 10.5%)		£5.99	Cetostearyl alcohol; phenoxyethanol	Rich cream	<input checked="" type="checkbox"/>
Cetraben Ointment (125g; 450g) (White soft paraffin 35.0% w/w, Light liquid paraffin 45.0% w/w)		£5.39 (per 450g)	Cetostearyl alcohol;		<input checked="" type="checkbox"/>
ZeroAQS cream (500g) (Macrogol cetostearyl ether 1.8%, liquid paraffin 6%, white soft paraffin 15%) - similar in composition to Oilatum cream and Diprobace cream		£3.29	Cetostearyl alcohol, Chlorocresol	Light	<input checked="" type="checkbox"/>
Zerobase cream (50g; 500g [†]) (Liquid paraffin 11%) - similar composition to Diprobace cream		£5.26	Cetostearyl alcohol, Chlorocresol	Light Cream	<input checked="" type="checkbox"/>
Zerocream (50g; 500g [†]) (Liquid paraffin 12.6%, white soft paraffin 14.5%) - similar composition to E45		£4.08	Cetyl alcohol; Polysorbate 40; Propylene glycol, Sorbic acid	Light	<input checked="" type="checkbox"/>
Zeroderm Ointment (125g; 500g) (Liquid paraffin 40%, white soft paraffin 30%) - similar composition to Hydromol and Epaderm		£4.10	Cetearyl Alcohol; Polysorbate 60	Greasy	<input checked="" type="checkbox"/>
Zerodouble Gel (100g; 475g) (Isopropyl myristate 15%w/w, liquid paraffin 15%w/w) - similar in composition to double gel, available as a squeezable bottle		£4.71 (per 475g)	Triethanoamine; Phenoxyethanol; Isopropyl myristate	Medium Rich Cream	<input checked="" type="checkbox"/>
Zeroquent cream (100g; 500g) (Light liquid paraffin 8%, white soft paraffin 4%, refined soya bean oil 5%) - similar in composition to Unguentum M		£6.99	Cetostearyl alcohol; Polysorbate 40; Propylene glycol; Sorbic acid	Medium Rich Cream	<input checked="" type="checkbox"/>
PROPRIETARY EMOLLIENT PREPARATIONS (note this list is not exhaustive but reflects items in common use)		Basic NHS Price*	Potential Sensitizers	Consistency	Contains Paraffin
Aveeno Cream (100ml, 300ml [†]) *** (ACBS)*** colloidal oatmeal in emollient basis		£3.97 (per 100ml)	Benzyl alcohol; Cetyl alcohol; isopropyl palmitate	Light	
Diprobace Cream (50g; 500g [†]) (Cetomacrogol 2.25%, cetostearyl alcohol 7.2%, liquid paraffin 6%, white soft paraffin 15%)		£6.32	Cetostearyl alcohol; chlorocresol	Light	<input checked="" type="checkbox"/>
Diprobace Lotion (50ml; 300ml)		£3.49 (300ml)	Cetostearyl alcohol, benzyl alcohol	Light	<input checked="" type="checkbox"/>
Diprobace Ointment (50g; 500g) (White soft paraffin 95% / Liquid paraffin 5% ointment)		£5.99	None Listed	Greasy	<input checked="" type="checkbox"/>
Doublebase Gel (100g; 500g) (Isopropyl myristate 15%, liquid paraffin 15%)		£5.83	Triethanoamine; Phenoxyethanol; Isopropyl myristate	Medium Rich Cream	<input checked="" type="checkbox"/>
E45 cream (50g; 125g; 350g; 500g [†]) (Light liquid paraffin 4%, cetomacrogol, white soft paraffin 10%, hypoallergenic anhydrous wool fat 1% in glyceryl monostearate)		£5.62	Cetostearyl alcohol; Hydroxybenzoates (parabens)	Light	<input checked="" type="checkbox"/>
E45 lotion (200ml; 500ml) *** (ACBS)*** (Light liquid paraffin 4%, cetomacrogol, white soft paraffin 10%, hypoallergenic anhydrous wool fat 1% in glyceryl monostearate)		£4.50 (per 500ml)	Benzyl alcohol; Isopropyl Palmite, Hydroxybenzoates (parabens)	Ligher formulary suitable for hairy areas, skin folds, face or scalp.	<input checked="" type="checkbox"/>
Epaderm Cream (50g [†] ; 500g [†]) (Yellow soft paraffin 15%, liquid paraffin 10%, emulsifying wax 5%)		£6.95	Cetostearyl alcohol; chlorocresol	Medium Rich Cream	<input checked="" type="checkbox"/>
Epaderm Ointment (125g; 500g; 1000g) (Emulsifying wax 30%, yellow soft paraffin 30%, liquid paraffin 40%)		£6.53	Cetostearyl alcohol	Greasy	<input checked="" type="checkbox"/>

Authors: Reema Patel and Claudette Allerdycy, Pharmaceutical Team Croydon CCG

Prices taken from Drug tariff May 2016 (Based on 500g/ml unless otherwise specified) or C&D March 2016 or MIMS March 2016

[†] Product available with pump dispenser

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PROPRIETARY EMOLLIENT PREPARATIONS (note this list is not exhaustive but reflects items in common use)	Basic NHS Price*	Potential Sensitizers	Consistency	Contains Paraffin
Hydromol Cream (50g; 100g; 500g; 1000g) (Sodium pidolate 2.5%, liquid paraffin 13.8%)	£11.92	Cetostearyl alcohol; Hydroxybenzoates (parabens);	Medium Rich cream	<input checked="" type="checkbox"/>
Hydromol Ointment (500g; 1000g) (Yellow soft paraffin 30%, emulsifying wax 30%, liquid paraffin 40%)	£4.89	Cetostearyl alcohol	Greasy	<input checked="" type="checkbox"/>
HypoBase Gel (500g) (Isopropyl myristate 15%w/w, liquid paraffin 15%w/w)	£5.83	Triethanolamine, Phenoxyethanol	Medium Rich Cream	<input checked="" type="checkbox"/>
Isomol Gel (100g, 500g) (Isopropyl myristate 15%w/w, liquid paraffin 15%w/w)	£3.99	Triethanolamine,	Medium Rich Cream	<input checked="" type="checkbox"/>
Oilatum Cream (500ml[†]; 1050ml) (Light liquid paraffin 6%, white soft paraffin 15%)	£4.99 (per 500ml)	Cetostearyl alcohol; Propylene glycol; Benzyl alcohol Sorbic acid	Light cream	<input checked="" type="checkbox"/>
QV Cream (100g; 500g; 1005kg[†]) (Glycerol 10%, light liquid paraffin 10%, white soft paraffin 5%)	£5.92	cetostearyl alcohol, hydroxybenzoates (parabens)	Medium Rich cream	<input checked="" type="checkbox"/>
QV intensive Ointment (450g) (Light liquid paraffin 50.5%, white soft paraffin 20%)	£5.71 (per 450g)	Cetostearyl alcohol	Greasy	<input checked="" type="checkbox"/>
QV Lotion (250ml; 500ml) (White soft paraffin 5%)	£5.29 (per 500ml)	Cetosteryl Alcohol; Hydroxybenzoates (parabens)	Ligher formulary suitable for hairy areas, skin folds, face or scalp.	<input checked="" type="checkbox"/>
Thirty:30 Onitment (125g; 250g; 500g) (Emulsifying wax 30%w/w Yellow soft paraffin 30w/w)	£6.47	Cetostearyl alcohol	Greasy	<input checked="" type="checkbox"/>
Ultrabase Cream (50g; 500g[†]) (Water-miscible, containing liquid paraffin and white soft paraffin)	£4.80	Hydroxybenzoates (parabens); Disodium edentate; Stearyl alcohol	Light	<input checked="" type="checkbox"/>
Unguentum M Cream (50g; 100g; 200ml[†]; 500g) (Saturated neutral oil, liquid paraffin, white soft paraffin)	£8.48	Cetostearyl alcohol; Polysorbate 40; Propylene glycol; Sorbic acid	Medium Rich Cream	<input checked="" type="checkbox"/>

Preparations that can be used as soap substitutes

SOAP SUBSTITUTES	Basic NHS Price*	Potential Sensitizers	Contains Paraffin
Aqueous Cream (100g; 500g) (Emulsifying ointment 30%, phenoxyethanol 1% in purified water)	£4.80	Phenoxyethanol 1% (May vary with different manufacturers)	<input checked="" type="checkbox"/>
Emulsifying ointment BP (100g; 500g) (Emulsifying wax 30%, white soft paraffin 50%, liquid paraffin 20%)	£2.04	Cetostearyl alcohol	Greasy <input checked="" type="checkbox"/>
Epaderm Ointment (125g; 500g; 1000g) (Emulsifying wax 30%, yellow soft paraffin 30%, liquid paraffin 40%)	£6.53	Cetostearyl alcohol	Greasy <input checked="" type="checkbox"/>
ZeroAQS (500g) (Macrogol cetostearyl ether 1.8%, liquid paraffin 6%, white soft paraffin 15%) - similar in composition to Oilatum cream and Diprobace cream)	£3.29	Cetostearyl alcohol, Chlorocresol	<input checked="" type="checkbox"/>

Products with additional ingredients

PREPARATIONS CONTAINING UREA (note this list is not exhaustive but reflects items in common use)	Basic NHS Price*	Potential Sensitizers	Contains Paraffin
Aquadrate cream (100g) (urea 10%)	£4.37 (per 100g)	None Listed	
Balneum Cream (500g) (Urea 5%, ceramide 0.1%)	£9.97	Benzyl alcohol; Polysorbates; propylene glycol	<input checked="" type="checkbox"/>
Balneum Plus Cream (100g, 500g[†]) (Urea 5%, lauromacrogols 3%)	£14.99	Benzyl alcohol; Polysorbates	<input checked="" type="checkbox"/>
Calmurid Cream (100g; 500g[†]) (Urea 10%, lactic acid 5%)	£34.00	None Listed	
Eucerin Intensive Cream (100ml) (Urea 10%)	£7.93 (per 100g)	Benzyl alcohol, isopropyl palmitate, wool fat	
Flexitol Heel balm (40g; 75g; 200g; 500g) (Urea 25%)	£14.75	Benzyl alcohol, cetostearyl alcohol	
ImuDERM Cream (500g) (Urea 5%, glycerine 5%)	£6.50	Benzyl alcohol, cetearyl alcohol, Phenoyethanol	

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Preparations with antimicrobials

PROPRIETARY EMOLLIENT PREPARATIONS WITH ANTI_MICROBIALS (note this list is not exhaustive but reflects items in common use)	Basic NHS Price*	Potential Sensitizers	Contains Paraffin
Dermol cream (100g; 500g) (Benzalkonium chloride 0.1%, chlorhexidine hydrochloride 0.1%, isopropyl myristate 10%, liquid paraffin 10%)	£6.63	Cetostearyl Alcohol; Benzalkonium chloride; Phenoxyethanol	<input checked="" type="checkbox"/>
Dermol 500 lotion (500ml) (Benzalkonium chloride 0.1%, chlorhexidine hydrochloride 0.1%, liquid paraffin 2.5%, isopropyl myristate 2.5%)	£6.04	Cetostearyl alcohol	<input checked="" type="checkbox"/>
Eczmol cream (250ml) (Chlorhexidine gluconate 1 % in emollient basis)	£3.70	Cetostearyl Alcohol, Isopropyl Alcohol, Macrogol Cetostearyl Ethers	<input checked="" type="checkbox"/>

Emollient Bath Additives ****Not to be used routinely- bath additives typically require 10-20 minutes contact to be absorbed onto the skin to be effective****

Emollients applied directly to the skin (not bath additives) are the main stay of managing eczema and psoriasis, as this is more cost effective and provides better moisturisation. There may be a limited place for bath additives where patients are not able to comply with directly applying an emollient e.g. babies and young children.^{6,7}

PROPRIETARY EMOLLIENT BATH PREPARATIONS (note this list is not exhaustive but reflects items in common use)	Basic NHS Price*	Potential Sensitizers	Contains Paraffin
Aveeno Bath Oil (250ml) ***(ACBS)*** (Colloidal oatmeal, white oat fraction in emollient basis)	£4.49	Bees Wax; Fragrance;Triclosan	
Balneum Bath Oil (200ml; 500ml; 1000ml) (soya oil 84.75%)	£5.38	Butylated hydroxytoluene; Propylene glycol; Fragrance	
Balneum Plus Bath Oil (500ml) (soya oil 82.95%, mixed lauromacrogols 15%)	£6.66	Butylated hydroxytoluene; Propylene glycol; Fragrance	<input checked="" type="checkbox"/>
Cetraben Emollient Bath Additive (500ml) (light liquid paraffin 82.8% w/w)	£5.75	None listed	<input checked="" type="checkbox"/>
Dermalo Bath Emollient (500ml) (acetylated wool alcohols 5%, liquid paraffin 65%)	£3.44	Lanolin\derivatives	<input checked="" type="checkbox"/>
Doublebase emollient bath additive (liquid paraffin 65%)	£5.45	Cetostearyl alcohol	<input checked="" type="checkbox"/>
E45 Emollient Bath Oil (250ml; 500ml) ***(ACBS)*** (cetyl dimeticone 5%, liquid paraffin 91%)	£5.11	None listed	<input checked="" type="checkbox"/>
Hydromol Bath and Shower emollient (350ml; 500ml; 1000ml) (isopropyl myristate 13%, light liquid paraffin 37.8%)	£4.42	Isopropyl Myristate	<input checked="" type="checkbox"/>
Oilatum Emollient Bath Additive (250ml;500ml) (light liquid paraffin 63.4%)	£4.57	Fragrance;Lanolin\derivatives	<input checked="" type="checkbox"/>
Oilatum Junior Bath Additive (150ml; 250ml;300ml, 600ml) (light liquid paraffin 63.4%)	£5.89 (per 600ml)	Acetylated lanolin alcohols, isopropyl palmitate	<input checked="" type="checkbox"/>
QV 85.09% bath oil (250ml; 500ml) (light liquid paraffin 85.13%)	£4.71	None listed	<input checked="" type="checkbox"/>
Zerolatum Emollient Bath additive (500ml) (liquid paraffin 65%, acetylated wool alcohols 5%)	£4.79	Isopropyl Myristate; Lanolin\derivatives	<input checked="" type="checkbox"/>
Zeroneum Bath Additive (500ml) (refined soya bean oil 83.35%)	£4.48	Butylated hydroxytoluene; Laureth 4	
PROPRIETARY EMOLLIENT BATH PREPARATIONS WITH ANTI MICROBIALS **should ONLY be used where infection is clinically significant in flare ups**	Basic NHS Price*	Potential Sensitizers	Contains Paraffin
Dermol 200 Shower Emollient (benzalkonium chloride 0.1%, chlorhexidine hydrochloride 0.1%, liquid paraffin 2.5%, isopropyl myristate 2.5%)	£3.55 (per 200ml)	Cetostearyl alcohol	<input checked="" type="checkbox"/>
Dermol 600 Bath Emollient (600ml) (benzalkonium chloride 0.5%, liquid paraffin 25%, isopropyl myristate 25%)	£7.55 (per 600ml)	Polysorbate 60	<input checked="" type="checkbox"/>
Emulsiderm liquid emulsion (300ml; 1000ml) (benzalkonium chloride 0.5%, liquid paraffin 25%, isopropyl myristate 25%)	£3.85 (per 300ml)	Include polysorbate 60	<input checked="" type="checkbox"/>
Oilatum Plus (500ml) (benzalkonium chloride 6%, triclosan 2%, light liquid paraffin 52.5%)	£6.98	Acetylated lanolin alcohols, isopropyl palmitate	<input checked="" type="checkbox"/>

References:
1. NICE Clinical Knowledge Summaries; <http://cks.nice.org.uk/dermatitis-contact/prescribinginfosub:3>. 2. NICE Clinical Guideline 57 Atopic eczema in children December 2007 <http://www.nice.org.uk/nicemedia/live/11901/38566/38566.pdf>. 3. BNF online; <http://www.medicinescomplete.com/mc/bnf/current/PHP7454-suitable-quantities-for-prescribing.htm>; accessed 03.05.16. 4. NHS National Patient Safety Agency Rapid Response Report 4 Fire hazard with paraffin based skin products on dressings and clothing November 2007; <http://www.nrls.npsa.nhs.uk/resources/?entryid45=59876>. 5. MHRA Drug Safety Update, Volume 6, issue 8, March 2013: Aqueous cream: may cause skin irritation, particularly in children with eczema, possibly due to sodium lauryl sulfate content; <http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON254804>. 6. DTB Bath emollients for atopic eczema: why use them? Drug & Therapeutics Bulletin. 2007; 45(10): 73-5. 7. Tarr A *et al* BMJ 2009; 339: b4273

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