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## **‘SLS or Sodium Lauryl Sulphate**

an anionic surfactant and emulsifier that is a well known irritant’

### **Background:**

The emollient aqueous cream BP is frequently used for the treatment of atopic dermatitis (AD), yet it is associated with a high rate of adverse cutaneous reactions. It contains the harsh anionic surfactant sodium lauryl sulphate, a known negative environmental factor associated with the exacerbation of AD.

### **Objectives:**

To investigate the effect of aqueous cream BP on stratum corneum (SC) integrity and skin barrier function in volunteers with a predisposition to a defective skin barrier.

### **Methods:**

Thirteen volunteers with a previous history of AD (no symptoms for 6 months) applied aqueous cream BP twice daily to the volar side of one forearm for 4 weeks. The other forearm was left untreated as a control. Permeability barrier function and SC integrity were determined before and after treatment by measuring transepidermal water loss (TEWL) in conjunction with tape-stripping. For comparison, 13 volunteers with current AD were recruited for assessment, without treatment, of SC integrity and skin barrier function at unaffected sites.

### **Results:**

Topical application of aqueous cream BP resulted in significant elevation of baseline TEWL and a concomitant decrease in SC integrity. Measurements made after no treatment in volunteers with current AD, at unaffected sites, suggest that application of aqueous cream BP negatively affects the skin barrier towards the damaged state associated with onset of flares of the disease.

### **Conclusions:**

Aqueous cream BP used as a leave-on emollient caused severe damage to the skin barrier in volunteers with a previous history of AD. Aqueous cream BP should not be used as a leave-on emollient in patients with AD.

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*Aqueous Cream contains around 8% Emulsifying Wax*

**Emulsifying Wax** contains

**EITHER**

- Cetearyl Alcohol and Sodium Lauryl Sulphate

**OR**

- Cetearyl Alcohol and PEG 20 Stearate (also known as Polawax GP200)

*Jaychem uses the latter Emulsifying Wax*

**healthE** Aqueous Cream BP ‘SLS FREE’ - Contains **NO** Sodium Lauryl Sulphate (SLS FREE)

**healthE** Fatty Cream - Contains **NO** Sodium Lauryl Sulphate (SLS FREE)

**healthE** Non-Ionic Cream (Cetomacrogol 1000 BP) - Contains **NO** Sodium Lauryl Sulphate (SLS FREE)