**Estesol®**

**Liquid skin cleanser for light dirt, with strong washing power and good skin compatibility.**

**Description**
Estesol® is a soap-free skin cleanser with strong washing power and good skin compatibility. It thoroughly cleans all light dirt which can be removed without the use of scrubbers and solvents. To improve skin compatibility, ESTESOL® contains a mild surfactant made up of sugar tensides.

**Use**
- Rub small amount of Estesol® thoroughly onto dry hands.
- Add a little water and continue washing.
- Rinse with plenty of water and dry thoroughly.

**Areas of Application**
For general purpose hand washing and removal of light industrial soils.

**Product Description**
Clear, viscous light green liquid; density (at 68°F): approx. 1.02 g/cm³; pH: 5.0 - 6.0.

**Ingredients**
- Water
- Sodium Laureth Sulfate
- Sodium Chloride
- Cocamidopropyl Betaine
- PEG-6 Caprylyl / Capric Glycerides
- C12-C13 Alkyl Lactate
- Decyl Glucoside
- Fragrance
- 2-Bromo-2-Nitropropane-1,3-Diol
- Citric Acid
- Blue 1
- Yellow 5

**Features**
- Good skin compatibility.
- 1ml of product dispensed per pump.
- Pleasant fragrance and feel.
- Excellent lathering properties.

**Benefits**
- Gentle to the skin even with everyday use.
- 2000 washings per bottle ensures cost savings over many competitive liquid products.
- Encourages handwashing.
- Easily covers skin surfaces and promotes sustained handwashing.

**First Aid**
If ESTESOL® accidentally enters the eyes, flush thoroughly with lukewarm water. Contact a physician if burning sensation persists.

...keeping working skin healthy.
**Skin Compatibility Tests**

Estesol® has been subjected to clinical testing for its skin compatibility with good results (certified by the Dermatological Clinic, Municipal Hospital, Krefeld).

The good skin compatibility of Estesol® was documented using recognized experimental test methods on human skin, such as the Duhring Chamber Test [2] and the Elbow Washing Test [3] (Research Department, Stockhausen Chemical Factory, Krefeld).

In a modified Duhring Chamber Test, according to Frosch and Kligman [2], as well as Kresken et al. [4], Estesol® demonstrated good skin compatibility in comparison to sodium lauryl sulfate, a leading syndet commonly used in surfactants (see table).

**TABLE:**

Skin compatibility of ESTESOL® in the modified Duhring Chamber Test

<table>
<thead>
<tr>
<th>Product</th>
<th>Irritation</th>
<th>Application Time</th>
<th>Relative skin compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESTESOL®</td>
<td>1.8</td>
<td>22.8</td>
<td>17.0</td>
</tr>
<tr>
<td>Sodium Lauryl Sulfate 0.5%</td>
<td>3.1</td>
<td>14.8</td>
<td>8.4</td>
</tr>
</tbody>
</table>

1 n=24
Test period: August, 2006
Test concentration: undiluted

2 Accumulated irritation mean average value for reddening, scaling and chapped skin, each visually calculated according to a value scale from 0 (no symptoms) to 4 (strongest symptoms). Maximum value x = 12 (strongest symptoms).

3 Maximum application time: h = 48 hours (24 hrs on day 1, and 6 hrs each on days 2 to 5).

4 Expression of a non-linear ratio between the skin irritation found and the application time of the product.

**Storage Information**

ESTESOL® can be stored in a closed container for at least 30 months at room temperature. The change in viscosity, which is sometimes observed, has no effect on the quality of the product.

All STOKO® Skin Care products are tested for stability at temperatures between 23°F and 104°F. When tested at temperatures below 41°F and above 86°F, the products begin to fluctuate in viscosity. Hand cleaners may become cloudy or freeze partially at temperatures of 32°F or below, however, they are usable after thawing.

**Additional Information**

Occupational skin irritation, frequent washing or harsh climates can lead to dry, rough and chapped skin [1-5]. This condition can result in irritation/rupture of the outer layer of the skin which impairs its natural protective function. To regenerate damaged tissue after work, the skin should be regularly treated with STOKOLAN® or STOKO®LOTION. In doing so, the skin is replenished with moisture, lipids and hydrophilic nutrients. People who already have extremely rough or very dry skin are advised to use a Before Work cream with a high oil content, such as STOKO DURAPRO®. Contact STOKO® Skin Care or its appointed distributors for advice on selecting the appropriate products.

**Sizes**

- 2000ml SOFTBOTTLE (for STOKO VARIO® SVP dispenser) 8 83311 06
- 2000 ml ONE-PUMP® (for STOKO® ONE-PUMP dispenser) 8 83309 06
- 4.0L Bottle (for 4.0L Dispenser) 32138
- 1 gallon (pour bottle) 2 83317 04

For MSDS, visit www.stokoskincare.com.