EcoHydra® Antimicrobial Hand Lotion

Product Overview

Product Description

The EcoHydra® Antimicrobial Hand Lotion is a daily moisturising lotion that helps heal dry or chapped skin whilst its antimicrobial properties disinfect the hands, therefore helping to prevent infections. This lotion is ideal for those who wash their hands frequently. It contains no Triclosan.

Key Features and Benefits

- Kills up to 99.999% of germs within 15-30 seconds
- Provides ongoing protection against germs throughout the day
- Improves the skin’s natural integrity and restores natural pH levels
- Designed for frequent use
- Daily use as a moisturiser meets WHO, NICE and NHS cleanyourhands™ campaign guidelines for hand hygiene
- 100% Triclosan and alcohol free
  - Non-flammable
  - Safe for use with children or mental health patients
  - Suitable for use across all religious beliefs
  - Does not promote superbug resistance

Recommended Areas of Use

This product is suitable for use in any environment which requires the highest standards of hand hygiene whilst maintaining the integrity of the skin, such as healthcare and catering industries, as well as domestic and institutional areas. The EcoHydra® Antimicrobial Hand Lotion has been independently tested and is highly effective against a number of commonly occurring bacteria.

Instructions for Use

Apply a small amount of the EcoHydra® Antimicrobial Hand Lotion. Massage thoroughly over all surfaces of the hands for 15 seconds. Reapply as required.

Physical Properties

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Ingredients</td>
<td>0.1% v/v Benzalkonium Chloride</td>
</tr>
<tr>
<td>Hazardous Ingredients</td>
<td>No hazardous chemicals</td>
</tr>
<tr>
<td>Colour</td>
<td>Creamy opaque lotion</td>
</tr>
<tr>
<td>Fragrance</td>
<td>Fresh</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Cream</td>
</tr>
<tr>
<td>Density (Kg/L)</td>
<td>1.005</td>
</tr>
<tr>
<td>pH</td>
<td>5.5</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Complete</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt;150°F</td>
</tr>
</tbody>
</table>

Safety Data Sheet

For full information on safe handling, storage and disposal of this product a safety data sheet is available on request from EcoHydra®.
Packaging Format and Item Numbers

EcoHydra® Antimicrobial Hand Lotion:
240ml table top pump bottle

<table>
<thead>
<tr>
<th>Item Number</th>
<th>EHT/L 240</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carton Quantity</td>
<td>36</td>
</tr>
<tr>
<td>Carton Dimensions (LxWxH) (mm)</td>
<td>300x300x200</td>
</tr>
<tr>
<td>Carton Weight (Kg)</td>
<td>10.5</td>
</tr>
<tr>
<td>EAN Barcode</td>
<td>5060311530141</td>
</tr>
</tbody>
</table>
Test Results

Bactericidal and Yeasticidal Efficacy

prEN 12054: Chemical disinfectants and antiseptics – Hygienic hand rub test for the evaluation of bactericidal activity (in vitro)

**Purpose:** To determine the bactericidal efficacy of hygienic hand rub when used post-contamination of hands.

**Method:** Initial bacterial count is determined. The bacterial test suspension is mixed with the hand rub test solution in a sterile universal. After 30 seconds contact time, the bacterial count is again determined.

**Results:**

<table>
<thead>
<tr>
<th>Organisms Tested</th>
<th>Results (log reduction)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Pseudomonas aeruginosa</em> ATCC 9027</td>
<td>4  5  5</td>
</tr>
<tr>
<td>Methicillin Resistant <em>Staphylococcus aureus</em> (MRSA) ATCC 43300</td>
<td>5  5  5</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em> ATCC 6538, ATCC 12493S</td>
<td>4  5  5</td>
</tr>
<tr>
<td><em>Enterococcus faecalis</em> ATCC 29212</td>
<td>5  5  6</td>
</tr>
<tr>
<td><em>Candida albicans</em> ATCC 10231</td>
<td>5  5  5</td>
</tr>
<tr>
<td><em>Serratia marcescens</em> ATCC 8100</td>
<td>5  5  5</td>
</tr>
</tbody>
</table>

**Conclusion:** EcoHydra® Antimicrobial Hand Lotion demonstrated a log reduction in initial bacterial count of 5 within 30 seconds against all of the above organisms, and a log reduction of at least 4 after only 15 seconds against these organisms.
Frequently Asked Questions

Q. What is an antimicrobial hand lotion?
A. An antimicrobial hand lotion is an antiseptic lotion that is used to moisturise the hands and help heal dry or chapped skin whilst disinfecting by quickly killing, neutralising, or inhibiting the growth of pathogens on the hands, with the aim of avoiding transmission of pathogens.

Q. Why do you recommend a hand lotion as part of your Hand Hygiene Triangle?
A. In 2002 the U.S. Centers for Disease Control recommended the use of a hand lotion as part of good hand hygiene practice. The key benefit of EcoHydra’s lotion is that it also has an active ingredient to disinfect the hands.

Q. How does a hand lotion contribute to the health of skin?
A. In day-to-day circumstances most people do not wash their hands frequently enough to prevent the spread of microorganisms. Using a hand lotion that has a disinfecting quality will decrease the spread of infections.

For healthcare workers and others in the food, military, or other industry that demands it, hand washing can be as frequent as 20 times per day. In this case, a hand lotion applied at regular intervals will help to maintain the smooth surface of the skin, and prevent cracks and chapping that can lead to areas that might harbour germs.

Q. Why is the EcoHydra Antimicrobial Hand Lotion so unique?
A. EcoHydra’s Antimicrobial Hand Lotion is a new hand lotion with an antimicrobial agent that destroys up to 99.999% of known microbes instantly, while protecting and softening the skin. It is formulated with the moisturising properties of Aloe Vera to add additional skin conditioning and healing.

Q. How does the EcoHydra® Antimicrobial Hand Lotion kill pathogens?
A. The EcoHydra® Antimicrobial Hand Lotion contains the active ingredient Benzalkonium chloride (BAC). This ingredient has inherent antimicrobial properties and has a well-established safety record – for example, it has been approved by the FDA for use as an active ingredient in the oral cavity. The concentration of BAC in this product (0.1%) is very low, decreasing the possibility of skin irritation. Surfactants are another important component in this hand lotion. They complement the BAC by penetrating the skin to deliver the BAC to attack the pathogens. Aloe Vera and emollients are key in conditioning, soothing, and moisturising the skin to maintain its integrity.

Q. How effective is the EcoHydra® Antimicrobial Hand Lotion against harmful microorganisms?
A. The hand lotion is effective against a wide range of common bacteria and yeast, killing up to 99.999% of disease-causing pathogens in as little as 15-30 seconds.

Q. How long is the EcoHydra® Antimicrobial Hand Lotion effective for?
A. The EcoHydra® Antimicrobial Hand Lotion has residual germ-killing properties that have been shown to remain active and effective against microorganisms long after application, ensuring excellent ongoing protection. However, this residual activity is not permanent and regular re-application of this and/or other EcoHydra® hand sanitisation products should be practised.

Q. How much of the EcoHydra® Antimicrobial Hand Lotion needs to be used?
A. Dispense a sufficient amount to ensure good coverage of the hands.
Q. Can the EcoHydra Antimicrobial Hand Lotion be used as part of a general handwashing protocol for hospital personnel?

A. Yes. EcoHydra’s products were designed with the clinical environment in mind; however, they are gentle enough for daily use on the sensitive skin of children. Therefore, they have applications in all businesses, for example medical clinics, food preparation services, and schools.

Q. Under what conditions would the EcoHydra Antimicrobial Hand Lotion not be used?

A. This product meets the performance criteria for healthcare personnel antiseptic hand lotions. In addition to healthcare settings, the Hand Lotion may be used in clinical and food settings, as well as for personal hygiene. However, it is intended for use primarily as a lotion rather than as a simple hand sanitiser, for which the EcoHydra Hand Sanitiser is more appropriate. Note that the EcoHydra Hand Lotion is fully compatible with the EcoHydra Hand Sanitiser, and will not neutralise its effectiveness.

Q. What is the shelf life of the EcoHydra® Antimicrobial Hand Lotion?

A. The EcoHydra® Antimicrobial Hand Lotion has a shelf life of three years. We have a symbol on our label which denotes “Use within 18 months of opening”.

Q. What legislation and regulations apply to the EcoHydra® Antimicrobial Hand Lotion?

A. The EcoHydra® Antimicrobial Hand Lotion is governed by the Biocidal Products Directive (EU Regulation 98/8/EC), and thus we are able to make claims on its efficacy.

Q. What specific certification or EN standards does the EcoHydra® Antimicrobial Hand Lotion meet?

A. The EcoHydra® Antimicrobial Hand Lotion complies with the standard certification prEN 12054.
In Vitro Test
A test performed in an artificial, controlled experimental environment, such as a test tube, rather than within a living organism or natural setting.

Log Reduction
In tests evaluating the bactericidal activity of hand sanitisers, the effectiveness can be measured by calculating the difference in the bacterial count between a test sample containing the hand sanitiser and a control sample in the absence of the hand sanitiser. The result is quoted as a Log or percentage reduction. Reductions of Log 1, 2, 3, 4 and 5 correspond to 90%, 99%, 99.9%, 99.99% and 99.999% reductions respectively, and so on.

Methicillin Resistant Staphylococcus aureus (MRSA) (bacteria)
MRSA is a strain of Staph. Aureus and is resistant to a number of different antibiotics, including methicillin, and is therefore a very significant clinical challenge. MRSA can cause severe infections within the human body, such as skin infections, blood poisoning, endocarditis, and urinary tract infections, and the bacterium is transferred via contact with contaminated objects, surfaces, and people through skin-to-skin contact.

Pseudomonas aeruginosa (bacteria)
An opportunistic pathogen found in many environments including water, air and soil, as well as in humans. It rarely causes diseases in healthy humans, but targets immunocompromised individuals such as cancer or burn victims, or cystic fibrosis patients, and is therefore a very common cause of hospital-acquired infections. It is transferred via the air or contact with the damaged skin, and accesses the patients’ tissues, replicating, producing toxins, causing, for example, lung and urinary tract damage.
**Serratia marcescens (bacteria)**
An opportunistic pathogen commonly found in water, soil, plants and animals. It causes infections in hospitals by targeting immunocompromised patients. *S. marcescens* can be transferred by direct contact with contaminated biomaterials and people, resulting in a wide range of disease such as urinary tract infections, wound infections, and respiratory tract infections. Most strains are resistant to many antibiotics used to treat bacterial infections.

**Staphylococcus aureus (bacteria)**
A normal inhabitant of the skin and mucous membranes in the nose of a healthy human. Food contaminated with *Staph. aureus* can cause food poisoning, and the bacterium is also a leading cause of hospital-acquired infections, such as skin infections, blood infections, meningitis, and pneumonia. It is also capable of releasing numerous toxins and has acquired resistance to nearly all antibiotics.

**Yeasticidal**
An agent with the ability to destroy or inhibit the growth of yeast.