

# D-176

# LIQUID HAND DISHWASHING

## DERMO

## GUIDELINE FORMULARY

### DESCRIPTION

High performance product, mild to skin  
Product without ethanol  
Ecological and biodegradable product  
Designed with the ecological LEVENOL® chemistry

### COMPOSITION

|                           | %         |
|---------------------------|-----------|
| EMAL® 227E <sup>(1)</sup> | 55.6      |
| OXIDET® DMCLD             | 13.3      |
| EMANON® XLF               | 4.0       |
| AMIDET® N                 | 2.1       |
| DANOX® PL-10              | 2.0       |
| Citric Acid (50%)         | 0.7       |
| KAO Fragrance             | q.s.      |
| Dye(s)                    | q.s.      |
| Preservative              | 2.0       |
| Deionized Water           | Up to 100 |

(1) 55.6% of EMAL® 227E (SLES at 27% a.m) can be replaced by 53.6% of EMAL® 228HP (SLES at 28% a.m) or by 21.4% approx. of EMAL® 270D or EMAL® 270E.

### TECHNICAL CHARACTERISTICS

### Kao Method

|                                 |                        |                       |
|---------------------------------|------------------------|-----------------------|
| APPEARANCE (20°C):              | Pearled viscous liquid | KCSA-258              |
| pH (as it is):                  | 7.0 - 7.5              | KCSA-014              |
| VISCOSITY BROOKFIELD (20°C,cP): | Approx. 1,600          | KCSA-227              |
| SURFACTANT ACTIVE CONTENT (%):  | Approx. 25             | KCSA-246              |
| STABILITY TEST:                 | Correct                | (1 month 40°C/RT/5°C) |

## RECOMMENDED OPERATIVE METHOD

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Add EMAL® 227E, OXIDET® DMCLD, EMANON® XLF and AMIDET® N and citric acid . Stir until complete homogeneous mixture is obtained.

Continue with the addition of the rest of water slowly stirring during all the dilution process.

Add DANOX® PL-10 if pearled effect is desired and stir until homogenize all the mixture.

Add dye, perfume and preservative, stir after each addition until complete homogenization.

Adjust viscosity with NaCl, stirring until complete homogenization.

Finally, unload the product.

## COMPONENTS

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**AMIDET® N** (PEG-4 Rapeseedamide, ≈ 95% a.m.): non-ionic character. Nitroso-amines free thickener. It increases the foam volume and improves the quality of it. It reduces the irritation potential of the anionic surfactants on the skin. Multi-functional agent.

**DANOX® PL-10** (pearling concentrate, ≈ 52% dry matter): anionic and non-ionic character. Nitroso-amines free product (its composition doesn't contain any Nitrogen derivative). It allows modifying the final appearance of the formula, providing it with a beautiful pearled appearance. No heating is needed. Ecological product. Suggested dosage: 3 - 10%.

**EMAL® 227E** (Sodium Laureth Sulfate, ≈ 27% a.m.): anionic character. Primary surfactant, highly foaming. Good detergent properties.

**EMANON® XLF** (Glycereth-7 Caprylate/Caprata, » 100% a.m.): non-ionic character. Optimized non-ionic surfactant for liquid hand dishwashing formulations, which provides foam in presence of dirt. Eco-toxicologically friendly. Acts as hydrotrope in concentrated formulations.

**OXIDET® DMCLD** (Cocamine Oxide, » 30% a.m.): non-ionic/cationic character (depending on the pH). Stable at acidic and alkaline pH. Foaming and detergent. Thickening and fragrance solubilizing agent in sodium hypochlorite solutions.

The information and recommendations in this publication are to the best of our knowledge reliable. However, nothing herein is to be construed as a warranty or representation. Users should make their own tests to determine the applicability of such information or the suitability of any products for their own particular purpose.

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Ref.

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