# Crystal clear micellar gel

# Micellar gel with 1.5% Velsan Flex + 0.3% Benzyl Alcohol

**without further surfactant**

CRYSTAL CLEAN MICELLAR GEL


| | | KB 2023-008-006 | |
|---|---|---|---|
| A | Water | Diluent | Ad 100% |
| | Glycerin 85% | Humectant | 3.00 % |
| | BioDTox | Active | 2.00 % |
| | Benzyl Alcohol | Preservative | 0.30 % |
| B | Aristoflex Velvet (Clariant) Polyacrylate Crosspolymer-11 | Rheology Modifier | 1.00 % |
| C | **Velsan Flex (Clariant)** Capryloyl/Caproyl Anhydro Methyl Glucamide (and) Water | Solubilizer & Preservative Booster | **1.50 %** |

## PROCEDURE

| | |
|---|---|
| **I** | Mix components of A and stir until homogenous |
| **II** | Add B to I and stir at 200 rpm with a finger stirrer until polymer is fully hydrated. |
| **III** | In a separate beaker mix components of C and stir until fully solubilized . |
| **IV** | Add III to II and stir until solution is clear. |
| **V** | Add C to IV and stir until homogenous. |
| **VI** | Add D to V and stir until homogenous. |
| **VII** | Finally check pH and adjust if necessary to 6.3 |

## RESULTS

| | | |
|---|---|---|
| **Appearance** | : | clear gel |
| **pH** | : | 6.27 |
| **Viscosity** (Brookfield, 20rpm; 20°C) | : | 3500 mPas |
| **Stability** | : | 12 weeks @ RT & 40°C |
| **Microbiology** DIN ISO 11930 | : | Pass with criteria A |

# Cleansing – Solubilization – Preservative Boosting

## Challenge: Clear application with high water content

**KB 2023-008-006**

| | | | |
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| **PRESERVATIVE SYSTEM** | **USE CONCENTRATION** | **EFFICACY @ pH 6.3** | | | | | |
|---|---|---|---|---|---|---|---|
| | | **Pa** | **Sa** | **Ec** | **Ca** | **Ab** | **TOTAL** |
| Unpreserved | blank | F | F | F | A | B | **FAIL** |
| **Velsan Flex**<br>+ Benzylalcohol | **0.5%**<br>0.3% | A | A | A | A | A | **PASS*** |


Challenge test data according to ISO 11930. requirements F: **FAIL** A: **PASSED A CRITERIA** B: **PASSED B CRITERIA**
**Pa:** Pseudomonas paraeruginosa; **Sa**: Staphylococcus aureus; **Ec**: Escherichia coli; **Ca**: Candida albicans; **Ab**: Aspergillus brasiliensis