

# Zemea®\* the Natural Choice... Purity and Renewable Performance



## Hand Cleanser

PHASE	INGREDIENT	Wt, %
A	Ammonium Lauryl Sulfate (ALS) (28%)	26.0
A	Cocamide DEA	6.0
A	Sodium Lauryl Sulfate (SLS) (25 %)	18.0
A	Zemea® Propanediol	2.0
A	Water	44.5
A	Zemea® Stearate	0.5
A	Irgasan	0.2
A	Tetrasodium EDTA (5 wt %)	2.0
A	Fragrance	QS
A	Citric acid (50 wt %)	QS

## Benefits of Zemea® Propanediol in Hand Cleanser Formulations

- Highly Stable
- Higher Viscosity
- Excellent Foaming

## Zemea® renewably sourced™ propanediol

### Procedure

- Blend ALS, Cocamide DEA, SLS and Zemea® Propanediol
- Add Zemea® Stearate
- Heat to 60° C.
- Cool to 30° C
- Add Irgasan and EDTA
- Stir until a homogeneous solution is formed
- Adjust to pH 6 with citric acid
- Add fragrance



## For additional information or samples, please contact:

DuPont Tate & Lyle Bio Products Customer Service

In the US, Canada, or Mexico: 1-866-404-7933

Other Countries: ++001-217-421-3443

On the web: [www.duponttateandlyle.com](http://www.duponttateandlyle.com)



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