

MOISTURE GUARD HAND SANITIZER

WITH ZEMEA* PROPANEDIOL

This moisturizing hand sanitizer formulation features Zemea propanediol, a versatile, 100% plant-based humectant that helps to combine two important functions – sanitizing and moisturizing – into one. Designed to sanitize, hydrate and kill 99.99% of germs on the skin, this nourishing formulation aids skin barrier integrity and renewal.

Formulated with AMP-ULTRA™ PC 2000 for outstanding gel neutralization, superior gel clarity and enhanced stability, even at challenging high-alcohol levels.

Phase		Trade name	INCI name	Supplier	Wt%
A	1.	Water	Aqua (Water)	-	Q.S.
	2.	Zemea propanediol	1,3-propanediol	Dupont, Tate & Lyle Bio Products	2.00%
	3.	Carbopol* 980 polymer	Carbomer	Lubrizol	0.25%
B	4.	Ethanol (96%)	Ethanol	-	70.0%
C	5.	AMP-ULTRA™ PC 2000	Aminomethyl Propanol	ANGUS	0.03%

PROCEDURE

1. Combine water and Zemea propanediol together, mixing with a propeller stirrer at 300-500 rpm until uniform.
2. Carefully disperse Carbomer into the mixture. Mix gently until the polymer is hydrated, and the dispersion is smooth and free of lumps.
3. Change the propeller stirrer to a paddle and slowly add the Ethanol with agitation, mixing until homogeneous.
4. Add AMP-ULTRA PC 2000 with gentle agitation (100 rpm) and mix until smooth and homogeneous.
5. Adjust pH with additional AMP-ULTRA PC 2000 to 7.2.

FORMULATION PROPERTIES AND NOTES

- Appearance: Transparent gel
- pH: 7.2
- Stability: 2 months at room temperature and 45°C
- Viscosity: 6,700 cP (Brookfield RVDV-IIT, spindle 4, 6 rpm, 1 min, 20°C)
- Formulation Reference: P.HS.P.2021.1

DISCOVER A **BETTER** WAY™

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