

SIMPLY EFFECTIVE HAND SANITIZER

WITH CARBOPOL* AQUA SF-1 POLYMER

For a simple-to-process hand sanitizer system, Carbopol Aqua SF-1 polymer provides effective thickening along with exceptional ease-of-use in formulations ranging from 60-80% alcohol. This hand sanitizer formulation features 70% alcohol for germ-killing efficacy and is easily cold processed for maximum production efficiency and throughput.

Formulated with AMP-ULTRA™ PC 2000 for outstanding Copolymer 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.	Carbopol Aqua SF-1 polymer	Acrylates Copolymer	Lubrizol	5.90%
B	3.	Ethanol (96%)	Ethanol	-	70.0%
C	4.	AMP-ULTRA PC 2000	Aminomethyl Propanol	ANGUS	0.22%

PROCEDURE

1. Mix Water and Carbopol Aqua SF-1 polymer using a paddle stirrer at 100-150 rpm.
2. Add Ethanol and mix until uniform.
3. Add the AMP-ULTRA PC 2000 neutralizing agent with gentle agitation (100-150 rpm) and mix until smooth and homogeneous.
4. Adjust pH to 7.3-7.5 for optimal clarity and viscosity.

FORMULATION PROPERTIES AND NOTES

- Appearance: Transparent gel
- pH: 7.3-7.5
- Stability: 2 months at room temperature and 45°C
- Viscosity: 3,400 cP (Brookfield RVDV-IIT, spindle 4, 6 rpm, 1 min, 20°C)
- Formulation Reference: P.HS.P.2021.5