



# Thick & Clear Gel Hand Sanitizer

Product Highlighted: *Floraesters K-20W® Jojoba*



a **Cargill** company

This light and fresh hand sanitizer with Floraesters® K-20W Jojoba is formulated to leave skin feeling hydrated without a tacky residue. The formula contains a high amount of ethanol (70%) to sanitize the hands while the unique synergy of Floraesters K-20W Jojoba and glycerin moisturizes the skin (ref. CS09-014<sup>1</sup>), leaving a silky-smooth skin feel.

Phase	Trade/Common Name	INCI Name	Manufacturer	%wt/wt
A.	Deionized Water Carbopol® Ultrez 10 Polymer	Water Carbomer	----- The Lubrizol Corporation	q.s. 0.50
B.	Glycerine 99.7% USP Kosher Klucel® H CS Hydroxypropylcellulose Natrosol® 250 HR CS Deionized Water	Glycerin Hydroxypropylcellulose Hydroxyethylcellulose Water	Acme-Hardesty Co Ashland Ashland -----	1.00 0.004 0.003 q.s.
C.	Ethanol, 200 Proof <sup>2</sup>	Alcohol Denat.	Remet Corporation	65.00
D.	Ethanol, 200 Proof <sup>2</sup> <b>Floraesters K-20W Jojoba</b>	Alcohol Denat. <b>Hydrolyzed Jojoba Esters (and) Water (Aqua)</b>	Remet Corporation <b>Floratech</b>	5.00 <b>0.50</b>
E.	AMP-Ultra® PC 2000, Neutralizing Amine	Aminomethyl Propanol	Angus Chemical Company	q.s.
<b>Total</b>				<b>100.00</b>

## Mixing Procedure

1. Add the Carbopol Ultrez 10 Polymer to the deionized water of Phase A at room temperature. Leave the polymer for self-wetting.
2. In a separate vessel, mix all ingredients of Phase B with moderate propeller agitation. Heat to 35-40°C. Keep mixing until the Klucel H CS Hydroxypropylcellulose and the Natrosal 250 HR CS are completely hydrated. Cool to room temperature.
3. Begin mixing Phase A with moderate propeller agitation until the Carbopol Ultrez 10 Polymer is completely hydrated. Add Phase B to Phase A at room temperature with moderate propeller agitation.
4. Add Phase C to Phase AB with moderate propeller agitation. The mixture will begin to gel.
5. In a separate vessel, mix all ingredients of Phase D before adding to Phase ABC with moderate propeller agitation.
6. Add Phase E to Phase ABCD with moderate propeller agitation to completely neutralize the Carbopol Ultrez 10 Polymer.

<b>Typical Properties:</b> <b>pH: 6.5 - 7.5</b> <b>Viscosity: 44 - 58kCP</b>
---

<sup>1</sup> Floratech Claim Sheet CS09-014: Increased Skin Hydration with K-20W Jojoba Plus Glycerin

<sup>2</sup> USP or alternative OTC grade Ethanol

Note: The information herein is based on our research and the research of others and is believed to be accurate. No guarantee of accuracy is made and the products are provided without warranty, expressed or implied and upon condition that purchasers shall make their own tests to determine the suitability, stability or safety of such products for their particular purposes. Likewise, statements concerning the possible use of these products are not intended as recommendations to use these products in infringement of any patent or in the treatment, prevention, or cure of any medical condition. INCI/trade names must be verified with each manufacturer. This formula has not been tested for sanitizing efficacy, and the manufacturer is responsible for ensuring the efficacy of any hand sanitizer formula. (Cleared for Public Disclosure)