



a Cargill company

Enhanced Emollient Hand Sanitizer

Products Highlighted: *Floraesters® IPJ, Floraesters K-100® Jojoba, and Florasomes® Jojoba*



Alcohol-based hand sanitizers are proven effective in the reduction of microbial contaminants. In addition to providing effective antimicrobial properties, this formula contains Floratech ingredients that deliver jojoba emolliency and showcase Florasomes Jojoba, soft particles which deliver Vitamin E and are available in various size and color combinations. 🍷*

Phase	Trade/Common Name	INCI Name	Manufacturer	%wt/wt
A.	Deionized Water	Water	-----	q.s.
	Florasolvs® PEG-150 Hydrogenated Jojoba	Jojoba Oil PEG-150 Esters	The HallStar Company	0.10
	Carbopol® ETD 2020 Polymer Gel ¹	Acrylates/C10-30 Alkyl Acrylate Crosspolymer (and) Water (and) Triethanolamine (and) Preservative	The Lubrizol Corporation	20.00
	Glycerine 99.7% USP Kosher	Glycerin	Acme-Hardesty Co.	5.00
B.	Ethanol Solutions 3, UN 1170, PG II, SDA 40-2, 200 Proof	Alcohol Denat.	Remet Corporation	61.00
	Floraesters IPJ	Isopropyl Jojobate (and) Jojoba Alcohol (and) Jojoba Esters	Floratech	1.50
	Fragrance ²	-----	-----	q.s.
	RTD Alpha-Bisabolol Natural	Bisabolol	The HallStar Company	0.10
	Floraesters K-100 Jojoba	Hydrolyzed Jojoba Esters (and) Jojoba Esters (and) Water (Aqua)	Floratech	0.10
C.	Simulgel 600	Acrylamide/Sodium Acryloyldimethyltaurate Copolymer (and) Isohexadecane (and) Polysorbate 80	Seppic	2.50
D.	Florasomes Jojoba MDS 10% Vitamin E, Tequila Sunrise³	Jojoba Esters	Floratech	0.50
	Florasomes Jojoba SMS 10% Vitamin E, Lapis³	Jojoba Esters	Floratech	0.50
Total				100.00

Mixing Procedure

1. Pour the deionized water of Phase A into a suitable vessel. Add the Florasolvs PEG-150 Hydrogenated Jojoba and mix with moderate propeller agitation until clear. Add the pre-mixed Carbopol ETD 2020 Polymer Gel to the deionized water and mix until uniform. Add the Glycerine 99.7% USP Kosher to the main mixing vessel and stir until uniform (see footnote 1).
2. Mix all components of Phase B in the Ethanol Solutions 3, UN 1170, PG II, SDA 40-2, 200 Proof. Allow time for the Floraesters K-100 Jojoba to completely dissolve in the Ethanol Solutions 3, UN 1170, PG II, SDA 40-2, 200 Proof. Add the pre-mixed Phase B to Phase A with moderate propeller agitation.
3. While batch (Phase AB) is mixing, slowly add Phase C. Mix until the Simulgel 600 is completely dispersed. Mix batch with homomixer to ensure complete mixing of all components.
4. Slowly add ingredients of Phase D with sweep agitation to finish the batch.

¹ Carbopol ETD 2020 Polymer Gel Instructions:

- Add 1.0% Carbopol ETD 2020 Polymer to deionized water with stirring. Allow time for the polymer to completely hydrate in the deionized water.
- Add Kathon® CG as a preservative.
- Neutralize the polymer system with triethanolamine (to pH 7) to create the final gel.
- Add this complete gel system to Phase A of the formula.

² Fragrance: Green Clover & Aloe HS H15455 [INCI: Fragrance] supplied by Agilex Fragrances

³ Any color or combination of colors may be used.

Typical Properties: pH: 6 - 7
Viscosity: 1,000 - 1,900cP

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)

Date Originated: April 2007

Revision Date: March 2021

File Name: C021

🍷* Efficacy Data Available (ref. [Poster 1: The Role of Hydrolyzed Jojoba Esters as a Unique Botanical Technology for Long-Acting Moisturization](#))