



# Brilliantly Clear Hair Gel

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



A brilliant, clear hair gel that provides hold without sacrificing flexibility. This clear gel utilizes Floraesters® K-20W Jojoba to impart shine, conditioning, and a degree of water resistance while acting as the neutralizer for the polymer system, thus forming a clear gel without the need for synthetic amines or metal hydroxides.

Phase	Trade/Common Name	INCI Name	Manufacturer	%wt/wt
A.	Deionized Water Carbopol® Ultrez 21 Polymer	Water Acrylates/C10-30 Alkyl Acrylate Crosspolymer	----- The Lubrizol Corporation	q.s. 0.50
B.	Deionized Water Florasolvs® PEG-150 Hydrogenated Jojoba	Water Jojoba Oil PEG-150 Esters	----- The HallStar Company	16.60 1.00
C.	<b>Floraesters K-20W Jojoba</b> Solubilisant LRI Ethanol Solutions 3, UN 1170, PG II, SDA 40-2, 200 Proof	<b>Hydrolyzed Jojoba Esters (and) Water (Aqua)</b> PPG-26-Buteth-26 (and) PEG-40 Hydrogenated Castor Oil Alcohol Denat.	<b>Floratech</b> Sensient Cosmetic Technologies Remet Corporation	<b>4.00</b> 3.00 6.00
D.	PVP/VA W-735 Deionized Water	VP/VA Copolymer Water	International Specialty Products -----	5.00 5.00
E.	Color Preservative	Color -----	----- -----	q.s. q.s.
<b>Total</b>				<b>100.00</b>

## Mixing Procedure

1. Disperse the Carbopol Ultrez 21 Polymer into the deionized water at room temperature. Allow sufficient time for complete hydration of the Carbopol Ultrez 21 Polymer.
2. Heat the deionized water of Phase B to 65°C and add the Florasolvs PEG-150 Hydrogenated Jojoba with stirring until dissolved.
3. At room temperature, dissolve the Floraesters K-20W Jojoba in the Ethanol Solutions 3, UN 1170, PG II, SDA 40-2, 200 Proof. Once dissolved, add the Solubilisant LRI to this mixture.
4. Dilute the PVP/VA W-735 with the deionized water listed in Phase D at room temperature.
5. Neutralize Phase A with Phase C. With complete mixing, pour Phase C into Phase A at a very slow pace (Avoid adding too quickly or the gel may form white agglomerates). Allow time for complete mixing until it becomes a clear gel.
6. Add Phase B to Phase AC with sweep action mixing at room temperature.
7. Add Phase D to Phase ABC with sweep action mixing at room temperature.
8. Slowly add Phase E to Phase ABCD with sweep action mixing at room temperature.

**Typical Properties:** pH: 5 - 6  
Viscosity: ≥ 120,000cP

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 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. (Cleared for Public Disclosure)