



MICRO POWDERS, INC.

Specialty Micronized Wax Additives

VOLUMIZING MASCARA			
INGREDIENT	INCI NAME	% W/W	SUPPLIER
Phase A			
Deionized Water	Water	46.30	N/A
Keltrol CG	Xanthan Gum	0.15	Kelco
Veegum HV	Magnesium Aluminum Silicate	0.40	Vanderbilt Minerals, LLC
Phase B			
Optiphen PO	Phenoxyethanol	0.50	Ashland LLC
Optiphen OD	Caprylyl Glycol	0.50	Ashland LLC
Dissolve NA-2	Disodium EDTA	0.05	Akzo Noble
Protachem GL-26 Inc.	Glycereth-26	1.00	Protameen Chemicals
AMP Ultra PC 2000	2-Amino-2-Methyl-1- Propanol	0.10	ANGUS Chemical Co.
Phase C			
Lipo SFS-5	Isododecane (&) Hydrogenated Polydecene (&) Bis-Behenyl/Isostearyl/ Phytosteryl /Dimmer Dilinoleyl Dimer Dilinoleate	5.00	Lipo Chemicals
Panalane L-14E	Hydrogenated Polybutene	2.00	Lipo Chemicals
Beeswax (White)	Beeswax	3.00	Koster Keunen, LLC
Lipovol J	Simmondsia Chinensis (Jojoba) Seed Oil	0.50	Lipo Chemicals
Hystrene 9718 NF EXT PWDR	Stearic Acid	2.00	PMC Biogenix
Arlacel 165	Glyceryl Stearate (&) PEG -100 Stearate	2.00	Croda
Lipocol S	Stearyl Alcohol	1.50	Lipo Chemicals
Permethyl 284C	C15-19 Alkane (&) C12 -14 Isoparaffin (&) Polyisobutene	4.00	Presperse
Microcare 350	Copernicia Cerifera (Carnauba) Wax	1.50	Micro Powders, Inc.
Micropoly® 220L	Polyethylene	3.50	Micro Powders, Inc.
Phase D			
DC 5225C	Cyclopentasiloxane (&) PEG/PPG-18/18 Dimethicone	1.00	Dow Corning
Black Iron Oxide (C7133)	Iron Oxide	10.00	Sensient Colors LLC
Dow Corning 749 Fluid	Cyclopentasiloxane (&) Trimethylsiloxisilicate	15.00	Dow Corning
Total		100%	

Procedure

1. In a main kettle, combine the Phase A ingredients one at a time. Mix with low shear homogenization and slight heating for 30 minutes until all are completely dissolved.
2. When Phase A is completely dissolved, add the Phase B ingredients one at a time and homogenization until completely dissolved.
3. When Phase B is completely dissolved, heat to 80°C under homogenization.
4. Pre-mix the ingredients of Phase D in a separate container until uniform.
5. In a separate vessel, weigh the components of Phase C and begin heating to 80°C. Mix until all the waxes are completely melted and dissolved.
6. When both phases are 80°C and uniform, slowly add Phases A&B to Phase C and homogenize for 15 minutes.
7. Begin to slow cool the batch. When the temperature reaches 45°C, slowly add pre-mixed Phase D under homogenization. Mix until uniform.
8. Switch to side wiper or paddle agitation, and continue to cool batch to room temperature. When batch is at room temperature, store in appropriate containers.