



O/W PRIMER WITH MICROSPERSION 519PC

<u>Product Name</u>	<u>INCI Name</u>	<u>%W/W</u>	<u>Supplier</u>
Phase A			
Deionized Water	Water	55.55	N/A
Disodium EDTA	Disodium EDTA	0.05	N/A
Pemulen TR-2	Acrylates/C10-30 Alkyl Acrylate	0.40	Noveon
Phase B			
Butylene Glycol	Butylene Glycol	1.00	N/A
Keltrol	Xanthan Gum	0.40	CP Kelco
Phase C			
Spheron® L-1600	Silica	5.00	Presperse LLC
Phase D			
SiClone SR-5	C13-16 Isoparaffin, C12-14 Isoparaffin, C13-15 Alkane	22.00	Presperse LLC
Microspersion 519PC	PTFE (&) Isohexadecane (&) Polyethylene	5.00	Micro Powders, Inc.
DC Formulation Aid 5200	Lauryl PEG/PPG-19/18 Methicion	2.00	Dow Corning
Abil EM-90	Cetyl PEG/PPG-10/1 Dimethicone	1.00	Degussa
Ganzpearl GMP-0800	Methyl Methacrylate Crosspolymer	2.00	Presperse LLC
Phase E			
TEA 99%	Triethanolamine	0.60	N/A
Phase F			
Euxyl PE-9010	Phenoxyethanol (&) Ethylhexylglycerin	1.00	Schülke
Phase G			
Fructan	Water (&) Butylene Glycol (&) Fructan	3.00	Presperse LLC
Seastarwort BG	Water (and) Butylene Glycol (&) Aster Maritima Extract	1.00	Biotech Marine

Procedure

1. In a main kettle, combine Phase A in the order listed with prop mixer (medium speed, 20-30°C). Mix until solution is uniform or well dispersed.
2. Combine Keltrol and Butylene Glycol of Phase B in a separate kettle with prop mixer (low speed, 20-30°C) for 5 minutes or until fully dispersed. Once dispersed, add to the main kettle.
3. Add Phase C to main kettle and mix well until dispersed.
4. Combine Phase D in a separate kettle and mix with prop mixer (low speed, 20-30°C) for 5

minutes or until fully dispersed.

5. Add Phase D to Phase ABC and homogenize for about 3-5 minutes (20-30°C) with medium shearing, increase shear speed as the batch starts to build viscosity.
6. Add TEA 99% of Phase E to the batch and mix well until uniform.
7. Add Phase F and mix well.
8. Add Phase G with low shear mixing until batch is uniform.