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## Sunscreen Inorganically

Raw Material	Composition	% w/w	Supplier
<b>PHASE A</b>			
Water	Water	56.20	-
Sodium Gluconate	Sodium Gluconate	0.10	Jungbunzlauer
<b>PHASE B</b>			
Glycerin 99.7% USP	Glycerin	5.00	Univar
Xanthan Gum FNCSP-PC	Xanthan Gum	0.10	Jungbunzlauer
<b>PHASE C</b>			
HALLBRITE® EZ-FLO TDX	Butyloctyl Salicylate, Titanium Dioxide (nano), Triceteareth-4 Phosphate, Dimethicone Crosspolymer, Silica	9.40	HallStar
HALLBRITE® EZ-FLO ZDX PLUS	Zinc Oxide (58%), Butyloctyl Salicylate, Ethylhexyl Methoxycrylene, Triceteareth-4 Phosphate, Triethoxycaprylsilane	6.00	HallStar
Versagel® SQ 1600-T	Squalane & Ethylene/Propylene/Styrene Copolymer & Butylene/Ethylene/Styrene Copolymer & Pentaerythrityl Tetra-di-t-butyl Hydroxyhydrocinnamate	5.00	Petresco
EL-8050 ID Silicone Organic Elastomer Blend	Isododecane, Dimethicone/Bis-Isobutyl PPG-20 Crosspolymer	3.00	Dow Corning®
FZ-3196	Caprylyl Methicone	4.00	Dow Corning®
Tego® Care 165	Glyceryl Stearate, PEG-100 Stearate	3.00	Evonik
CA5037 C1618 Cetyl Stearyl Alcohol	Cetyl Alcohol	3.00	Univar
Permacol® 350 Alcohol	C20-40 Alcohols	3.00	New Phase Technologies
<b>PHASE D</b>			
NataPres GS	Lactobacillus Ferment, Vitis Vinifera (Grape) Seed Extract	2.00	PCCA
Creme De Coco Bumble & Bumble	Fragrance	0.20	Orchidia

### MIXING INSTRUCTIONS (PHASES)

- A - Charge Phase A ingredients to main vessel. Begin mixing and heating to 80-85°C.  
B - Combine Phase B ingredients with mixing until xanthan gum is fully dispersed. Add Phase B to Phase A. Continue mixing and heating.  
C - Charge Phase C ingredients into a separate, heatable vessel. Begin mixing and heating to 80-85°C. When both phases are at temperature, add Phase C to main vessel. Maintain temperature and continue mixing for 20 minutes. Begin cooling to 40-45°C.  
D - When main vessel is below 45°C, add Phase D ingredients one after another. Allow 5 minutes mixing between each addition.

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