



A Group Company of MITSUBISHI CHEMICAL

Liquid Eyeliner with HS Pigments (Black & Navy)

Ingredient	INCI Name	Supplier	%	
			Black	Navy
Phase A				
DI Water	Aqua		q.s.	q.s.
Veegum® Ultra	Magnesium Aluminum Silicate	RT Vanderbilt	2.50	2.50
DI Water	Aqua		5.00	5.00
VP/VA Copolymer	VP/VA Copolymer		5.00	5.00
Butylene Glycol	Butylene Glycol		1.00	1.00
Pentylene Glycol	Pentylene Glycol		1.00	1.00
VanZan® NF	Xanthan Gum	RT Vanderbilt	0.40	0.40
Phase B				
DI Water	Aqua		q.s.	q.s.
BIB-HSA	Iron Oxides (&) Disodium Carboxyethyl Siliconate	Gelest	20.00	10.00
LIA-HSA	Ultramarines (&) Disodium Carboxyethyl Siliconate	Gelest	0.00	10.00
RIA-HSA	Iron Oxides (&) Disodium Carboxyethyl Siliconate	Gelest	0.00	0.00
WIA-HSA	Titanium Dioxide (&) Disodium Carboxyethyl Siliconate	Gelest	0.00	0.00
YIA-HSA	Iron Oxides (&) Disodium Carboxyethyl Siliconate	Gelest	0.00	0.00
25% Citric Acid Solution	Citric Acid (&) Aqua		q.s.	q.s.
Phase C				
Polysorbate 20	Polysorbate 20		0.33	0.33
Preservative			q.s.	q.s.
Phase D				
Avalure® UR 450	PPG-17/IPDI/ DMPA Copolymer	Lubrizol	10.00	10.00

Formula LF8-100 Procedure

- Add Magnesium Aluminum Silicate to DI water and homogenize for 15 min at 3000 rpm in main vessel. Dissolve VP/VA Copolymer in DI water (under heat if needed) and add to Phase A.
- Premix Xanthan gum in glycols. Add Premix to main vessel and homogenize until gum is fully hydrated.
- In a separate vessel, add pigments to DI water. Mix under a propeller blade until dispersed and adjust pH to 7.0. Add Phase B to Phase A and mix until homogeneous at a lower speed.
- Add Phase C and mix until dispersed and uniform.
- Add Phase D and mix until uniform. Adjust batch to pH 7.0, if needed.

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