Technical Bulletin

ELARA™ COSMETIC COLORANTS

Colorants for water, oil and solvent based systems

Elara colorants are designed for use in a wide range of formulations, from water-based and oil-based to even more demanding solvent-based systems. They perform well in all types of personal care products, from lip gloss and lip sticks to lotions and soaps.

Elara™ offers a significant improvement in lightfastness, averaging 2.5 times better than previous fluorescent colorants. They employ a revolutionary new thermosetting polymer component that is resistant to solvents commonly employed in nail enamels and hair sprays. Furthermore, because of the cross-linked nature of these materials, formulations can be processed at higher temperatures without adverse effects or migration of color.

Sales Code	Color	D&C Colorants (C.I. Number)	Lip	Eye	Hair	External
EL-11	Aurora Pink®	Red 28 (C.I. 45410), Red 22 (C.I. 45380)	Yes	No	No	Yes
EL-13	Rocket Red™	Red 28 (C.I. 45410), Red 22 (C.I. 45380), Orange 5 (C.I. 45370)	Yes	No	No	Yes
EL-15EC	Blaze Orange TM	Yellow 10 (C.I. 47005), Red 28 (C.I. 45410), Red 22 (C.I. 45380)	Yes	No	No	Yes
EL-17EC*	Saturn Yellow®	Yellow 10 (C.I. 47005)	Yes	No	Yes	Yes
EL-20	Ultra Violet™	Violet 2 Ext. (C.I. 60730), Red 28 (C.I. 45410)	No	No	Yes	Yes
EL-21	Corona Magenta TM	Red 28 (C.I. 45410), Red 22 (C.I. 45380)	Yes	No	No	Yes
EL-34**	Solar Yellow	Yellow 11 (C.I. 47000)	No	No	No	Yes
EL-37*	Horizon Blue™	Blue 1 (C.I. 42090)	Yes	Yes	Yes	Yes

^{*} Non-Fluorescent Colors (Not UV/Blacklight responsive)

Provided regulatory information based on EU regulations

Colorant INCI Name: Norbornanediamine/Resorcinol

Diglycidyl Ether Crosspolymer,

Aluminum Hydroxide, D&C Colorant(s)

Typical Physical Properties:

Density: $1.18g/cm^3$

Bulk Density: 0.36g/cm³ (22.5 lbs./ft³)
Particle Size: 2.5 microns (average)

Oil Absorption: 60 lbs. of oil/100 lbs. of pigment

Optical brightener additive for cosmetics - EL-00 Fluorescent Illuminator

Combining an optical brightener with DayGlo's ElaraTM polymer technology creates this exciting optical effect additive. This unique product provides the fluorescent effects of an optical brightener without the staining or dispersion problems often associated with brighteners. EL-00 can be used to enhance brightness of formulations, as a soft focus effect filler or simply to add fluorescence to an existing formulation.

INCI Name - EL-00 Fluorescent Illuninator:

Norbornanediamine/Resorcinol Diglycidyl Ether Crosspolymer, Aluminum Hydroxide, D&C Colorant(s)

Typical Physical Properties:

Density: $1.18g/cm^3$

Bulk Density: 0.36g/cm³ (22.5 lbs./ft³)
Particle Size: 2.5 microns (average)

Oil Absorption: 60 lbs. of oil/100 lbs. of pigment

Refractive Index: 1.56

Product Color: Off white powder

Recommended Sample Forumlations

These are simply recommended starting formulations. Customers should conduct their own stability testing to ensure the product's long-term stability. Pages 2-10 of this document.

Day-Glo Color Corp. • 4515 St. Clair Avenue • Cleveland, OH 44103 • (216) 391-7070 • www.dayglo.com



^{**} EL-34 is limited to nail enamel, soaps/shampoos, and other rinse-off products.





Product: BLUE FROST EYE SHADOW

Formula Code: **G6604-401.07**

Phase	Ingredients	INCI	%
A	ORANGE BLOSSOM WATER	Citrus Aurantium Amara Flower Water	15.300
	ARISTOFLEX VELVET	Polyacrylate Crosspolymer-11	0.400
	TWEEN 20	Polysorbate 20	1.000
	BOSWELLIA SERRATA	Water & Boswellia Serrata Extract & Phenoxyethanol & Sodium	2.000
	BT*	Benzoate	
	GLYCERIN	Glycerin	3.000
	BUTYLENE GLYCOL	Butylene Glycol	3.000
	ALCOHOL DENATURED	Alcohol Denat.	10.000
	JEECIDE CAP-5	Phenoxyethanol & Caprylyl Glycol & Potassium Sorbate & Water &	1.000
		Hexylene Glycol	
	GRANPOWDER QSC	Polymethylsilsesquioxane/Silica Crosspolymer	5.000
	PLANTAREN 2000 N	Decyl Glucoside	0.300
В	GRANRESIN SIW-MQIZ	Isododecane & Trimethylsiloxysilicate & Water & Propanediol &	25.000
		Decyl Glucoside	
	COCONUT OIL	Cocos Nucifera (Coconut) Oil	1.000
	GRANSURF 67	PEG-10 Dimethicone	1.000
C	ELARA HORIZON BLUE EL-37	Norbornanediamine/Resorcinol Digylcidyl Ether Crosspolymer &	10.000
		Aluminum Hydroxide & Blue 1 (CI 42090)	
	TIMIRON SUPER SILVER	Mica & Titanium Dioxide (CI 77891)	14.000
	DRY FLO PC	Aluminum Starch Octenylsuccinate	8.000

Formula Total: 100.000

Procedure

- 1. Weigh Phase A in the main kettle equipped with side sweep. Mix well until uniform.
- 2. Weigh Phase B in a side kettle and mix well. Heat to 50-55 C.
- 3. Add Phase B to Phase A. Mix well until uniform.
- 4. Add each ingredient consecutively from Phase C. Mix well after each addition and continue mixing until uniform.

*BCR (www.BCRingredients.com)





Product: STRAWBERRY SHOWER GEL

Formula Code: **G61526-427.01**

Phase	Ingredients	INCI	%
A	DEIONIZED WATER	Water	42.920
	BIOWAVE BCR*	Water & Propanediol & Polyglutamic Acid & Phenoxyethanol	2.000
	YOUTH 360 BCR*	Water & Boswellia Serrata Extract & Centella Asiatica Extract	2.000
		& Betula Alba Bark Extract & Polygonum Cuspidatum Root	
		Extract & Phenoxyethanol & Sodium Benzoate	
	JEECOL SA-21	Steareth-21	2.000
	DIOCIDE	Caprylyl Glycol & Phenoxyethanol & Hexylene Glycol	1.000
В	CARBOPOL ULTREZ 21	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.750
	POLYMER		
C	PROTERIC CAB-LC	Cocamidopropyl Betaine	7.500
	ISELUX SFS-SB	Water & Sodium Lauroyl Methyl Isethionate & Cocamidopropyl	25.000
		Betaine & Sodium Cocoyl Isethionate & Sodium Methyl Oleoyl	
		Taurate	
	RITA CA	Cetyl Alcohol	3.500
	GRANSIL VX-419	Bis-PEG-12 Dimethicone	3.000
	GRANPOWDER QSC	Polymethylsilsesquioxane/Silica Crosspolymer	3.000
	JEECHEM GMS-450	Glyceryl Stearate	1.500
D	CETIOL LC	Coco-Caprylate/Caprate	3.000
	ELARA ROCKET RED EL-13	Norbornanediamine/Resorcinol Diglycidyl Ether Crosspolymer &	0.780
		Aluminum Hydroxide & Red 28 (CI 45410) & Orange 5 (CI 45370)	
	ELARA BLAZE ORANGE EL-	Norbornanediamine/Resorcinol Diglycidyl Ether Crosspolymer &	1.000
	15	Aluminum Hydroxide & Yellow 10 (CI 47005) & Red 28 (CI 45410)	
		& Red 22 (CI 45380)	
D	TRIS AMINO	Tromethamine	0.750
E	STRAWBERRY WS	Fragrance	0.300
	FRAGRANCE, ORC1403533	-	

Formula Total: 100.000

Procedure

- 1. Weigh Phase A in the main kettle equipped with a propeller mixer.
- 2. Sprinkle Phase B into Phase A and mix well until dispersed. Then, heat 65-70C.
- 3. In a side kettle, weigh Phase C. Heat to 70-75C.
- 4. In a side kettle, pre-mix Phase D. Add to Phase C.
- 5. When at proper temperature, add Phase CD to Phase AB. Mix well until uniform.
- 6. Add Phase D to Phase ABCD. Mix until uniform.
- 7. Add Phase E to Phase ABCDE. Mix until uniform.
- 8. Cool to room temperature with slow side sweep mixing.

*BCR (www.BCRingredients.com)

DISCLAIMER: Our technical advice, information and statements - given verbally, in writing or in the form of test results are offered for your guidance without warranty. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE. This also applies where protective rights of third parties are involved. It does not release the user from the obligation to test the suitability of the products and formulas for the intended process and applications. Our guarantee is limited to the consistent quality of our products





Product: ELECTRIC PINK LIP GLOSS

Formula Code: **G106-431.01**

Phase	Ingredients	INCI	%
A	GRANSIL VX-401	Stearoxymethicone/Dimethicone Copolymer	18.000
	INDOPOL H-100	Polybutene	30.000
	EUTANOL G	Octyldodecanol	19.000
	GRANSIL EPSQ	Dimethicone/Divinyldimethicone/Silsesquioxane Crosspolymer	6.500
	PERFORMALENE 400	Polyethylene	4.500
	POLYETHYLENE		
	DERMOL 99	Isononyl Isononanoate	1.800
	SQUALANE	Squalane	0.900
	PROTACHEM GMS-D	Glyceryl Stearate SE	1.900
	ALCOLEC BS	Lecithin	0.400
	ELARA ROCKET RED EL-13	Norbornanediamine/Resorcinol Diglycidyl Ether Crosspolymer &	14.200
		Aluminum Hydroxide & Red 28 (CI 45410) & Orange 5 (CI 45370)	
	ALT-WHITE TSR	Titanium Dioxide (CI 77891) & Aluminum Hydroxide &	2.800
		Triethoxycaprylylsilane	

Formula Total: 100.000

- 1. Weigh Phase A in the main kettle equipped with homogenizer. Heat to 85-90C.. Mix until uniform.
- 2. Pour into containers at 70-75C.





Product: NEON PINK LIP GLOSS

Formula Code: **G106-428.01**

Phase	Ingredients	INCI	%
\mathbf{A}	GRANSIL VX-401	Stearoxymethicone/Dimethicone Copolymer	18.000
	INDOPOL H-100	Polybutene	30.000
	EUTANOL G	Octyldodecanol	19.000
	GRANSIL EPSQ	Dimethicone/Divinyldimethicone/Silsesquioxane Crosspolymer	6.500
	PERFORMALENE 400	Polyethylene	4.500
	POLYETHYLENE		
	DERMOL 99	Isononyl Isononanoate	1.800
	SQUALANE	Squalane	0.900
	PROTACHEM GMS-D	Glyceryl Stearate SE	1.900
	ALCOLEC BS	Lecithin	0.400
	ELARA AURORA PINK EL-11	Norbornanediamine/Rescorcinol Diglycidyl Ether Crosspolymer &	14.200
		Aluminum Hydroxide & Red 28 (CI 45410) & Red 22 (CI 45380)	
	ALT-WHITE TSR	Titanium Dioxide (CI 77891) & Aluminum Hydroxide &	2.800
		Triethoxycaprylylsilane	

Formula Total: 100.000

- 1. Weigh Phase A in the main kettle equipped with homogenizer. Heat to 85-90C.. Mix until uniform.
- 2. Pour into containers at 70-75C.





Product: PASSION RED LIP COLOR

Formula Code: **G6366-3154.02**

Phase	Ingredients	INCI	%
A	JEECHEM CTG	Caprylic/Capric Triglyceride	29.000
	COCONUT OIL	Cocos Nucifera (Coconut) Oil	10.000
	GRANSIL VX-418	Bis-Stearyl Dimethicone	8.000
	RITA SAO	Prunus Amygdalus Dulcis (Sweet Almond) Oil	5.000
	PHYTOLANE LS	Olive Squalane	7.000
	SHEA BUTTER	Butyrospermum Parkii Butter	7.000
	REFINED CANDELILLA WAX	Euphorbia Cerifera (Candelilla) Wax	1.000
	MD-21		
	PERFORMALENE 400	Polyethylene	3.000
	POLYETHYLENE		
	BENTONE GEL EUG V	Octyldodecanol & Disteardimonium Hectorite & Propylene Carbonate	7.000
	VITAMIN E ACETATE	Tocopheryl Acetate	1.000
	ELARA ROCKET RED EL-13	Norbornanediamine/Resorcinol Diglycidyl Ether Crosspolymer &	15.000
		Aluminum Hydroxide & Red 28 (CI 45410) & Orange 5 (CI 45370)	
	CLOISONNE VIVID RED 450	Mica & Iron Oxides (CI 77491) & Titanium Dioxide (CI 77891) &	3.000
	DHCB	Silica	
В	NAT VANILLA MINT FL, UA6611	Flavor	4.000

Formula Total: 100.000

- 1. Weigh Phase A in the main kettle equipped with marine type propeller.
- 2. Heat to 85-90C and mix until completely uniform..
- 3. Cool to 70C and add Phase B. Mix until uniform.
- 4. Pour samples.





Product: LAVA PINK LIP COLOR

Formula Code: **G6366-430.01**

Phase	Ingredients	INCI	%
A	JEECHEM CTG	Caprylic/Capric Triglyceride	29.000
	COCONUT OIL	Cocos Nucifera (Coconut) Oil	10.000
	GRANSIL VX-418	Bis-Stearyl Dimethicone	8.000
	RITA SAO	Prunus Amygdalus Dulcis (Sweet Almond) Oil	5.000
	PHYTOLANE LS	Olive Squalane	7.000
	SHEA BUTTER	Butyrospermum Parkii Butter	7.000
	REFINED CANDELILLA WAX MD-21	Euphorbia Cerifera (Candelilla) Wax	1.000
	PERFORMALENE 400 POLYETHYLENE	Polyethylene	3.000
	BENTONE GEL EUG V	Octyldodecanol & Disteardimonium Hectorite & Propylene Carbonate	7.000
	VITAMIN E ACETATE	Tocopheryl Acetate	1.000
	ELARA AURORA PINK EL-11	Norbornanediamine/Rescorcinol Diglycidyl Ether Crosspolymer & Aluminum Hydroxide & Red 28 (CI 45410) & Red 22 (CI 45380)	13.500
	DUOCROME YR 422C	Mica & Titanium Dioxide (CI 77891) & Iron Oxides (CI 77492)	3.000
	REFLECKS DIMENSIONS GLITTERING RED G430S	Calcium Sodium Borosilicate & Titanium Dioxide (CI 77891)	1.500
В	NAT VANILLA MINT FL, UA6611	Flavor	4.000

Formula Total: 100.000

- 1. Weigh Phase A in the main kettle equipped with marine type propeller.
- 2. Heat to 85-90C and mix until completely uniform..
- 3. Cool to 70C and add Phase B. Mix until uniform.
- 4. Pour samples.





Product: SUMMER SKY EYESHADOW

Formula Code: **G6916-3155.01**

Phase	Ingredients	INCI	%
A	GRANRESIN MQI-T50	Isododecane & Polymethylsilsesquioxane/Trimethylsiloxysilicate	27.000
	GRANRESIN PHQ-FLUID	Polyphenylsilsesquioxane/Trimethylsiloxysilicate & Dimethicone	10.000
	BENTONE GEL ISD V	Isododecane & Disteardimonium Hectorite & Propylene Carbonate	13.700
	GRANSIL PC-12	Isododecane & Polysilicone-11	10.200
	PARAFFIN WAX 140/145	Paraffin	4.000
	WHITE BEESWAX NF	Beeswax	2.000
	SYNCROWAX HRC	Tribehenin	1.000
	JEENATE 3H	Polyethylene	1.800
	DRY FLO PC	Aluminum Starch Octenylsuccinate	3.000
	AEROSIL 200	Silica	0.300
	SILVER 2800	Mica	10.000
В	GRANPOWDER EDC-600	Divinyldimethicone/Dimethicone/Phenylsilsesquioxane	5.000
		Crosspolymer	
	RON TI-12	Titanium Dioxide (CI 77891)	2.000
	ELARA HORIZON BLUE EL-	Norbornanediamine/Resorcinol Digylcidyl Ether Crosspolymer &	10.000
	37	Aluminum Hydroxide & Blue 1 (CI 42090)	

Formula Total: 100.000

- 1. Weigh Phase A in the main kettle equipped with a propeller mixer. Heat to 80-85 C and mix for 15-20 minutes.
- 2. Micro-pulverize Phase B. Add to Phase A and mix well until uniform.
- 3. Cool batch to room temperature using side sweep agitation.





Product: GRAPEFRUIT GLOW MASK

Formula Code: **G6791-404.03**

Phase	Ingredients	INCI	%
A	DEIONIZED WATER	Water	64.700
	NATROSOL 250 HHR, 2% AQ	Water & Hydroxyethylcellulose	5.000
	SOL.		
	BUTYLENE GLYCOL	Butylene Glycol	5.000
	TWEEN 20	Polysorbate 20	0.200
	PLANTAREN 2000 N	Decyl Glucoside	0.200
	TRIS AMINO	Tromethamine	0.200
	PELEMOL G 7A	Glycereth-7 Triacetate	3.500
	JEECIDE CAP-5	Phenoxyethanol & Caprylyl Glycol & Potassium Sorbate & Water &	1.000
		Hexylene Glycol	
	GRANPOWDER QSC	Polymethylsilsesquioxane/Silica Crosspolymer	5.000
В	GRANSIL SIW-038	Dimethicone & Polysilicone-11 & Butyrospermum Parkii (Shea)	10.000
		Butter & Water & Glycerin & Decyl Glucoside	
	RHEOSOL AVH	Sodium Polyacrylate & Ethylhexyl Stearate & Trideceth-6	2.300
C	ELARA BLAZE ORANGE EL-15	Norbornanediamine/Resorcinol Diglycidyl Ether Crosspolymer &	0.750
C	EE HUTBEREE OIGH VOE EE 13	Aluminum Hydroxide & Yellow 10 (CI 47005) & Red 28 (CI 45410) &	0.750
		Red 22 (CI 45380)	
	GLYCERIN	Glycerin	2.000
		·	
D	GRAPEFRUIT EO	Citrus Grandis (Grapefruit) Peel Oil	0.150

Formula Total: 100.000

- 1. Weigh Phase A in the main kettle equipped with side sweep agitation. Mix well.
- 2. Weigh Phase B in a side kettle in a side kettle and slowly add to Phase A.
- 3. In a side kettle, mix Phase C until uniform. Add to Phase AB and mix well.
- 4. Add Phase D and mix until uniform.





Product: LUMINOUS LAVENDER MASK

Formula Code: **G6791-403.03**

Phase	Ingredients	INCI	%
A	DEIONIZED WATER	Water	64.700
	NATROSOL 250 HHR, 2% AQ	Water & Hydroxyethylcellulose	5.000
	SOL.		
	BUTYLENE GLYCOL	Butylene Glycol	5.000
	TWEEN 20	Polysorbate 20	0.200
	PLANTAREN 2000 N	Decyl Glucoside	0.200
	TRIS AMINO	Tromethamine	0.200
	PELEMOL G 7A	Glycereth-7 Triacetate	3.500
	JEECIDE CAP-5	Phenoxyethanol & Caprylyl Glycol & Potassium Sorbate & Water &	1.000
		Hexylene Glycol	
	GRANPOWDER QSC	Polymethylsilsesquioxane/Silica Crosspolymer	5.000
В	GRANSIL SIW-038	Dimethicone & Polysilicone-11 & Butyrospermum Parkii (Shea)	10.000
		Butter & Water & Glycerin & Decyl Glucoside	
	RHEOSOL AVH	Sodium Polyacrylate & Ethylhexyl Stearate & Trideceth-6	2.300
C	ELARA ULTRA VIOLET EL-20	Norbornanediamine/Resorcinol Diglycidyl Ether Crosspolymer &	0.750
		Aluminum Hydroxide & Violet 2 (CI 60730) & Red 28 (CI 45410)	
	GLYCERIN	Glycerin	2.000
D	LAVENDER 40/42 OIL	Lavandula Hybrida Oil	0.150

Formula Total: 100.000

- 1. Weigh Phase A in the main kettle equipped with side sweep agitation. Mix well.
- 2. Weigh Phase B in a side kettle in a side kettle and slowly add to Phase A.
- 3. In a side kettle, mix Phase C until uniform. Add to Phase AB and mix well.
- 4. Add Phase D and mix until uniform.