













# PRODUCTS FOR COSMETICS AND HEALTH & BEAUTY APPLICATIONS

# DG Series

Colorants for water and oil based systems

Combining D&C certified dyes with a proprietary polymer matrix produces  $DermaGlo^{TM}$  Cosmetic Colorants. This pigment technology from DayGlo Color Corp. creates the cleanest, brightest shades possible from existing D&C certified components. The DG series colorants are recommended for use in a wide variety of traditional cosmetic products, from lipsticks and blushes to soaps and lotions. These unique shades can be used to enhance or expand your current cosmetic color palette.

- Creates bright clean colors
- Easy to blend and process
- Virtually eliminates bleeding and staining
- Easily dispersed, no need to create a pre-dispersion
- Expands the available color gamut



Sales Code	Color	D&C Colorants (C.I. Number)	Lip**	Eye**	External**
DG-11	Pink	Red 28 (C.I. 45410), Red 21 (C.I. 45380:2)	Yes	No	Yes
DG-13	Red	Orange 5 (C.I. 45370:1), Red 28 (C.I. 45410)	Yes	No	Yes
DG-14	Red-Orange	Yellow 7 (C.I. 45350:1), Orange 5 (C.I. 45370:1), Red 28 (C.I. 45410)	No	No	Yes
DG-17	Yellow	Yellow 7 (C.I. 45350:1)	No	No	Yes
DG-20	Violet*	Violet 2 (C.I. 60725)	No	No	Yes
DG-0205	Orange	Orange 5 (C.I. 45370:1)	Yes	No	Yes
DG-R422	Cerise	Red 22 (C.I. 45380)	Yes	No	Yes
DG-R428	Magenta	Red 28 (C.I. 45410)	Yes	No	Yes
DG-Y410	Yellow*	Yellow 10 (C.I. 47005)	Yes	No	Yes

\* Non-Fluorescent Colors (Not UV/Blacklight responsive) \*\*Provided regulatory information based on US FDA regulations



#### **INCI Name:** Polyester-3, D&C Colorant(s)

### **Typical Physical Properties:**

Melting Point: Density: Bulk Density: Particle Size: Oil Absorption: 137-144°C (279-293°F) 1.2g/cm<sup>3</sup> 0.41g/cm3 (25.6 lbs./ft<sup>3</sup>) 5.7 microns (mean average) 54 lbs. of oil/100 lbs. of pigment

# Colorants for solvent based systems

The DermaGlo<sup>™</sup> DGS colorants are designed for use in challenging formulations that are solvent based and/or require extreme processing temperatures. DGS products employ a revolutionary new thermosetting polymer component that is resistant to solvents commonly employed in nail enamels and hair sprays. Further, as a result of the cross-linked nature of these materials, formulations can be processed at higher temperatures without adverse effects.

Sales Code	Color	D&C Colorants (C.I. Number)	Lip**	Eye**	External**
DGS-11	Pink	Red 28 (C.I. 45410), Red 22 (C.I. 45380)	Yes	No	Yes
DGS-13	Red	Yellow 10 (C.I. 47005), Red 28 (C.I. 45410), Red 22 (C.I. 45380)	Yes	No	Yes
DGS-15	Orange	Yellow 10 (C.I. 47005), Red 28 (C.I. 45410), Red 22 (C.I. 45380)	Yes	No	Yes
DGS-17	Yellow*	Yellow 11 (C.I. 47000)	No	No	Yes
DGS-19	Blue	Ultramarine Blue (C.I. 77007)	No	Yes	Yes
DGS-20	Violet*	Violet 2 Ext. (C.I. 60730), Red 28 (C.I. 45410)	No	No	Yes
DGS-21	Magenta	Red 28 (C.I. 45410), Red 22 (C.I. 45380)	Yes	No	Yes
DGS-37	Blue*	Blue 1 (C.I. 42090)	Yes	Yes	Yes
DGS-531	Yellow*	Yellow 10 (C.I. 47005)	Yes	No	Yes

\* Non-Fluorescent Colors (Not UV/Blacklight responsive) \*\*Provided regulatory information based on US FDA regulations

INCI Name:	Bis(Glycidoxyphenyl)propane / Bisaminomethyl-
	norbornane copolymer, Aluminum Hydroxide,
	D&C Colorant(s)

## **Typical Physical Properties:**

Density:	$1.1 \mathrm{g/cm}^3$
Bulk Density:	$0.25 \text{g/cm3} (15.6 \text{ lbs./ft}^3)$
Particle Size:	2.5 microns (mean average)
Oil Absorption:	38 lbs. of oil/100 lbs. of pigment



## DGS-00 Fluorescent Illuminator

Optical brightener additive for cosmetics

Combining an optical brightener with DayGlo's DermaGlo 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. DGS-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:

Bis(glycidoxyphenyl)propane / Bisaminomethylnorbornane Copolymer, Diethylaminomethylcoumarin, Aluminum Hydroxide

### **Typical Physical Properties:**

Density:	1.1g/cm <sup>3</sup>
Bulk Density:	0.25g/cm3 (15.6 lbs./ft <sup>3</sup> )
Particle Size:	2.99 microns (mean average)
Oil Absorption:	38 lbs. of oil/100 lbs. of pigment
Refractive Index:	1.56
Product Color:	Off white powder



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## SAMPLE FORMULATIONS

These are simply recommended starting formulations. Customers should conduct their own stability testing to insure the product's long-term stability.



## Lip Stick —

Ingredient	Quantity	Supplier	INCI Name
Ceraphyl 368	3.00	ISP	Ethylhexyl Palmitate
Castor Oil USP	46.60	Acme-Hardesty	Ricinus Communis
Prisorine 2039	13.25	Uniqema	Isostearyl Isostearate
Ceraphyl 55	6.75	ISP	Tridecyl Neopentanoate
Mineral Oil	1.40	Penreco	Mineral Oil
Candelilla Wax	6.75	Strahl & Pitsch	Euphorbia Cerifera
White Beeswax	4.00	Strahl & Pitsch	Cera Alba
Ozokerite Wax	3.00	Strahl & Pitsch	Ozokerite
Carnuba Wax	1.00	Strahl & Pitsch	Copernica Cerifera
Purester 40	4.00	Strahl & Pitsch	Stearyl Benenate
LiquiPar Oil	0.25	ISP	Isopropyl, Isobutyl, Butyl Parabens
DermaGlo DG Pigment	10.00	DayGlo Color Corp.	Polyester-3, D&C Colorant

Procedure: Mix all components together and heat until a homogenous solution forms. Cool to 45°C and add pigment.

Lip Gloss			
Ingredient	Quantity	Supplier	INCI Name
			Hydrogenated Polyisobutene &
Versagel ME750	81.25	Penreco	Ethylene/Propylene/Styrene Copolymer &
			Butylene/Ethylene/Styrene Copolymer
Ceraphyl 368	10.00	ISP	Octyl Palmitate
Ceraphyl 55	5.00	ISP	Tridecyl Neopentanoate
Prisorine 2039	3.00	Uniqema	Isostearyl Isostearate
LiquiPar Oil	0.25	ISP	Isopropyl, Isobutyl, Butyl Parabens
DermaGlo DG Pigment	0.50	DayGlo Color Corp.	Polyester-3, D&C Colorant

**Procedure:** Mix all ingredients and heat slowly to 70-75°C with stirring until the mixture is uniform. Cool to 45°C and add flavor and color.

Lip Balm 🛑 🚽			
Ingredient	Quantity	Supplier	INCI Name
Crystalpet W	44.00	Crystal IncPMC	Pertolatum
Ceraphyl 368	20.00	ISP	2-Ethylhexyl Palmitate
Beeswax	10.00	Strahl & Pitsch	Cera Alba
Ozokerite Wax	8.70	Strahl & Pitsch	Ozokerite
Candellia Wax	6.00	Strahl & Pitsch	Euphorpia Cerifera
Light Mineral Oil	3.05	Penreco	Mineral Oil
Uvinul M-40	2.00	BASF	Benzophenone-3
Aerosil 200	5.00	Degussa	Silica
DermaGlo DG Pigment	1.00	DayGlo Color Corp.	Polyester-3, D&C Colorant
Phenonip	0.25	Clariant	Phenoxyethanol, Methyl, Butyl, Propyl, Ethylparaben

**Procudure:** Combine Petrolatum, waxes, ceraphyl, mineral oil and heat to 65° C. Mix until homogenous. Add Uvinul and continue mixing. Using a high-speed disperser, add silica slowly, then add pigment and mix until homogenous. Pour into tubes.

## SAMPLE FORMULATIONS

These are simply recommended starting formulations. Customers should conduct their own stability testing to insure the product's long-term stability.



# Temporary Hair Color, Aerosol Spray

Ingredient	Quantity	Supplier	INCI Name
D4# Refine Pharmaceutical Glaze, NF	14.80	Mantrose-Haeuser Co.	Shellac / Alcohol, Denatured
Glycerin	1.00	Acme-Hardesty	Glycerin
DC-193	0.55	Dow Corning	PEG-12 Dimethicone
Triethanolamine	1.56	U.S. Chemicals Inc.	Triethanolamine (TEA)
Bentone 27V	2.07	Elementis Specialties	Stearalkonium Hectorite
Ethyl Alcohol	12.50		Alcohol, Denatured
HO M60 Milled	6.20	Mississippi Lime Co.	Calcium Carbonate
			Bis(Glycidoxyphenyl)propane / Bisaminoethylnorbornane
DermaGlo DGS Pigment	18.60	DayGlo Color Corp.	Copolymer, Shellac, Dihydroxyethylcocamine oxide, D&C
U		•	Colorant
Ethyl Alcohol	42.72		Alcohol, Denatured

**Procedure:** Combine Shellac solution, Glycerin, DC-193 and TEA. Mix using high-peed disperser until homogenous. Slowly add Bentone 27, calcium carbonate and DGS pigment. Shear mixture at high speed for 15 minutes to insure 7 oz. (196 g) can contains 150 g paint mixture 46 g Dymel 152a propellant.

Face Paint			
Ingredient	Quantity	Supplier	INCI Name
Solution A			
Deionized Water	99.50		Water
Keltrol CG	0.50	CP Kelco	Xanthan Gum
Face Paint			
Solution A	63.25		
Glycerin	10.00	Acme-Hardestry	Glycerin
PVP K-15	2.50	ISP	Polyvinylpyrrolidinone
HO M60, Milled	5.00	Mississippi Lime Co.	Calcium Carbonate
Zeosyl 200	3.00	J.M. Huber	Aluminosilicate
Mirapol Surf-S110	0.75	Rhodia	Cocamidopropylhydroxy Sultane
DermaGlo DG Pigment	15.00	DayGlo Color Corp.	Polyester-3, D&C Colorant
Phenonip	0.50	Clariant	Phenoxyethanol, propylparaben, butylparaben, methylparaben, ethylparaben

### **Procedure:**

Solution A: Slowly feed xanthan gum into deionized water under agitation and mix vigorously until xanthan gum dissolves.

**Face Paint:** Combine Solution A, PVP, glycerin and Mirapol and mix with cowels mixer until clear solution is formed. Under agitation, disperse zeosyl, calcium carbonate and pigment until smooth paint is formed. Add Phenonip.

## SAMPLE FORMULATIONS

These are simply recommended starting formulations. Customers should conduct their own stability testing to insure the product's long-term stability.



# Hand Sanitizer

Ingredient	Quantity	Supplier	INCI Name
Water	37.00		Water
Carbopol ETD 2020	0.27	Lubrizol	Acrylates/C10-30 Alkyl Acrylate Crosspolymer
Triethanolamine	0.60	U.S. Chemicals Inc.	Triethanolamine (TEA)
			Bis(Glycidoxyphenyl)propane / Bisaminoethylnorbornane
DermaGlo DGS Pigment	0.13	DayGlo Color Corp.	Copolymer, Shellac, Dihydroxyethylcocamine oxide, D&C
			Colorant
Ethyl Alcohol	62.00		Alcohol, Denatured

**Procedure:** Dissolve Carbopol into the water with a high speed mixer, adjust pH to approx. 7.5 with TEA and add DGS pigment. Allow to mix for few minutes, then slowly add alcohol. Add fragrance as desired.

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