

**POPLON**

**(INDIA)**

**DYESTUFFS  
FOR  
PURE SILK**



## DYESTUFF FOR PURE SILK

This shade card illustrates the following range of dyes :

<b>POPSILK</b>	: Acid Milling Dyes
<b>POPSILK 'P'</b>	: Selected Popsilk Dyes especially developed for printing
<b>POPACID</b>	: Selected Acid dyes having exceptionally good levelling properties
<b>POPACID LIGHT FAST</b>	: Selected fast dyes having excellent properties
<b>POPDISCHARGE</b>	: Selected dyes suitable for white discharge
<b>POPZOL</b>	: Selected Direct Dyes
<b>POPLOK</b>	: 1 : 1 Metal Complex Dyes
<b>POPNIL</b>	: 1 : 2 Metal Complex Dyes
<b>POPSILK ND</b>	: Non-dischargeable Dyes

Most dyes among the milling acid, levelling Acid, metal complex and some selected dyes are suitable for application on pure silk. Precaution need be observed in optimising the percentage of shade for each colour so as to obtain the desired colour value brilliancy of shade and fastness properties.

### PROPERTIES OF DYESTUFF

#### POPSILK DYES

- exceptionally bright shades
- good to very good light fastness
- good to very good wet fastness

#### POPSILK 'P' DYES

- especially formulated for printing
- speciality is that they give an even shade on printing
- avoids the bariness which usually occurs due to susceptibility of iron contents as in the case of Popsilk Maroon V and Popsilk Navy Blue 2RN
- good to very good light fastness
- good to very good wet fastness
- This range comprises of the following items :  
Popsilk Bordeaux PF, Popsilk New Maroon PF, Popsilk Rust P H/Conc.,  
Popsilk Navy Blue BNSP, Popsilk Violet Brown P, Popsilk Brown GGF,  
Popsilk Coffee Brown P, Popsilk Olive P Conc., Popsilk Dark Green P, Popsilk Mehndi P, Popsilk Bottle Green P, Popsilk Grey GLP

### POPACID DYES

- very good levelling
- moderate light fastness
- moderate wet fastness

### POPACID LIGHT FAST DYES

- very bright shades
- recommended for export fabrics
- very good light fastness
- very good wet fastness

### POPDISCHARGE DYES

- especially developed on request of the silk dyers
- recommended only for dyeing and not for printing
- suitable for white discharge
- does not give any yellowing effect on discharge
- very good light fastness
- very good wet fastness

### POPZOL DYES

- recommended only for dyeing and not for printing
- moderate to good light fastness
- moderate to good wet fastness

### POPLON & POPNIL DYES

- excellent dyes for dyeing and printing
- recommended for export fabrics
- very good light fastness
- very good wet fastness

## PRE-TREATMENT OF RAW SILK

### DEGUMMING

Before silk is dyed it is necessary to remove the outer layer of silk gum (sericin). Unless gum is removed, silk tends to dye unevenly.

Degumming of raw silk is carried out in a bath, using a liquor to material ratio of 30 : 1 containing,

20 - 30 % Soap

1 - 2 % Kelinon F Supra

for 2 hours at 90 to 95°C.

### OPTICAL WHITENING

The degummed goods are treated in a bath containing,

0.5 - 1 % Silk White WHN Conc.  
2 - 5 gpl Sodium Hydrosulphite

or about 45 - 65 minutes at 60-70°C.

### DISSOLVING OF DYESTUFFS

The dyestuff is made to a smooth paste with cold soft water. Boiling water is then added with continuous stirring to effect solution. Boiling may be resorted to, if necessary.

### DYEING

The dye bath is set at 40°C with required quantity of pre-dissolved dyestuffs and 10-20% Glauber's Salt. The pre-wetted goods are then entered and worked for 15 minutes. The temperature of the dye bath is gradually raised to 90 to 95°C in 30 minutes and the dyeing continued for a period of 45 to 60 minutes. An addition of 1 to 2% glacial acetic acid or formic acid (85%) is made and dyeing continued for 10 to 15 minutes for full exhaustion. The material is then removed, washed and dried.

#### Note :

1. For dyeing light shades it is advisable to start the bath at room temperature and run the goods for 20 minutes before raising the temperature.
2. Common salt should not be used as it tenders the silk fibre.

### PRINTING

Following is the typical printing recipe,

x parts	Dyestuffs
40 parts	Solvent
30-50 parts	Urea/Glycerine
200 parts	Hot water
600 parts	Gum thickening (printing Gum Super AG)
20 parts	Ammonium Sulphate / Ammonium Oxalate
40 parts	Water
40 parts	Acetic Acid (Glacial)

1000 parts

The goods are printed, dried and steamed in star ager / cottage steamer for 60-120 minutes or in pressure at steamer 5 psi for 45 minutes.

The steamed goods are washed in cold water and then rinsed in a bath containing 1-2 gpl Kelinon F Supra at 40°C followed by another cold rinse.

## DISCHARGE PRINTING

### WHITE DISCHARGE

(I)	With Zinc dust - Bisulphite
	300 Parts Zinc dust
	50 Parts Water
	150 Parts Sodium Bisulphite
	500 Parts Gum Thickening
	<hr/>
	1000 Parts

Print dry and steam in star ager for 30-45 minutes, followed by thorough wash.

### (II) With Rangolite C

500 Parts	Gum Thickening
200 Parts	Zinc Oxide (1: 2)
150 Parts	Rangolite C
50 Parts	Water
	<hr/>
1000 Parts	

Print, dry and steam for 15 minutes in star ager, followed by a thorough wash.

### COLOURED DISCHARGE

X Parts	Popsilk-ND Dyestuff pasted with
20 Parts	Solvent
30 Parts	Urea
150-200 Parts	Hot Water
700 Parts	White Discharge Paste
	<hr/>
1000 Parts	

Print, dry and steam for 30-45 minutes, followed by a thorough wash.

Figures under the dischargeability column correspond to the respective dye dischargeability using Rangolite C. When any other chemical is used for discharging, it is advisable to first conduct separate trials.

### FASTNESS PROPERTIES

Light	-	1 to 8 in increasing order
Washing &	-	1 to 5 in increasing order
Others		
Dischargeability	-	G - Good, F - Fair, P - Poor

Note : All the dyes illustrated in this shade card are NON-BENZIDINE DYES

(Without Warranty)

**PATTERNS**

DYESTUFFS FOR SILK		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPSILK YELLOW 5GN	4-5	4-5	4-5	G
	POPSILK YELLOW 5GNE	4-5	4-5	4	G
	POPSILK YELLOW GL (1:2 Metal Complex)	5-6	4-5	4-5	F
	POPSILK YELLOW 2GLNI Conc. (1:2 Metal Complex)	5-6	4-5	4-5	F
	POPZOL CRYSOHENINE G H/CONC.	4-5	2-3	4	G
	POPSILK YELLOW RS	4-5	4	4	G
	POPSILK YELLOW 2RLN	4-5	4	4	G
	POPSILK MUSTARD H/CONC.	4-5	4-5	4-5	G
	POPSILK ORANGE GRN	4-5	4-5	4	G
	POPSILK ORANGE RL (1:2 Metal Complex)	5-6	4-5	4-5	G

2%      5%

DYESTUFFS FOR SILK		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPSILK PEACH H/CONC.	4-5	4-5	4	G
	POPSILK SCARLET N	4	4	4-5	G
	POPSILK RED GF	4	4-5	4-5	G
	POPSILK RED GRF	4-5	4-5	4-5	G
	POPDISCHARGEABLE RED GRSD	4-5	4-5	4-5	G
	POPSILK RED RF	4-5	4-5	4-5	G
	POPSILK BLOOD RED PF200%	5	4-5	4	G
	POPDISCHARGEABLE BLOOD RED DF	5	4-5	4-5	G
	POPACID RHODAMINE B	3	2	1-2	P
	POPSILK RED 3BN	5	4-5	4	G

2%      5%

		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPSILK RED 10B	5	4-5	4	G
	POPSILK RED 12BNF	5	4-5	4	G
	POPSILK CRIMSON	4-5	4-5	4	G
	POPSILK BORDEAUX PF	5	4	4-5	G
	POPSILK MAROON V	5	4	4-5	G
	POPSILK RUST P H/CONC.	5	4-5	4-5	G
	POPSILK NEW MAROON PF	4-5	4-5	4	G
	POPSILK PATENT BLUE AS	2	3-4	4	G
	POPSILK BLUE FFS	2	4-5	4	G
	POPSILK BLUE BRMD	2	4-5	4	G

2%

5%

		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPSILK BLUE 3RN	4-5	4-5	4	F
	POPSILK BLUE BRF	2	4	4	G
	POPSILK CYANINE BLUE G	2	4	4	G
	POPACID LIGHT FAST BLUE P CONC.	5	3-4	4	P
	POPACID LIGHT FAST BLUE 4GN	5-6	2-3	2-3	P
	POPACID LIGHT FAST BLUE BS	4-5	4-5	4	F
	POPACID LIGHT FAST BLUE GL	5	4-5	4	F
	POPSILK BRILL. SKY BLUE FRS	5	2-3	3-4	F
	POPSILK VIOLET 6BD Conc.	2	3-4	4-5	P
	POPSILK VIOLET 2RF	4	4	4	G

2%

5%

DYESTUFFS FOR SILK		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPSILK NAVY BLUE 2RNS	5	4	3-4	F
	POPSILK BROWN 2RLF	4-5	4-5	4-5	F
	POPSILK BROWN 7RN	4-5	4-5	4-5	G
	POPSILK BROWN GRF	5	4-5	4	F
	POPSILK VIOLET BROWN P	5	4-5	4	F
	POPSILK BROWN GGF	4-5	4-5	4-5	G
	POPSILK CAMEL F	4-5	4-5	4-5	G
	POPSILK COFFEE BROWN P	5	4-5	4-5	G
	POPMETALAN COFFEE BROWN	5-6	5	4-5	G
	POPMETALAN BROWN 2RLN	5-6	5	4-5	G

2%

5%

DYESTUFFS FOR SILK		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPMETALAN DARK BROWN 5R	5-6	5	4-5	G
	POPSILK KHAKI H/CONC.	5	4-5	4-5	G
	POPSILK OLIVE P CONC.	4-5	4-5	4	G
	POPSILK RUMBHA GREEN P	4	4	4	G
	POPACID GREEN VS	2	2-3	4	G
	POPACID LIGHT FAST GREEN GS	5-6	4	4-5	P
	POPACID LIGHT FAST GREEN BLS (1:2 Metal Complex)	5	4	4	F
	POPSILK PARROT GREEN	4	4	4	G
	POPSILK GREEN 3GM	3-4	3-4	4	G
	POPSILK DARK GREEN P	4	4-5	4	F

2%

5%

		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPSILK MEHNDI P	4-5	4-5	4	G
	POPSILK BOTTLE GREEN P	3-4	4	4	G
	POPSILK GREY GLP	4	4-5	4	F
	POPSILK * BLACK WAN	5-6	5	5	F
	POPSILK BLACK BG* (1:2 Metal Complex)	5	4	4	F
	POPLON YELLOW GR	5-6	4-5	4-5	F
	POPLON ORANGE G	6-7	4-5	4-5	G
	POPLON PINK B	5-6	4-5	4	F
	POPLON BORDEAUX RM	5-6	4-5	4	F
	POPLON BLUE 2G	5-6	4-5	4	G

2%

5%

\*3% 6 6%

		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPLON NAVY BLUE 2RLB	5-6	4-5	4	G
	POPLON GREEN BGI	5-6	4-5	4	F
	POPLON GREEN BL	5-6	4-5	4	F
	POPLON DARK GREEN B	6	4-5	4-5	G
	POPLON VIOLET BROWN B	5-6	4-5	4-5	G
	POPLON BROWN 2G	5	4-5	5	F
	POPLON BROWN GR	5	4-5	4	F
	POPLON GREY BEI	5-6	5	5	F
	POPNIL YELLOW GL	5-6	4-5	4-5	G
	POPNIL YELLOW 2GLN	5-6	4-5	4	G

2%

5%

DYESTUFFS FOR SILK		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPNIL YELLOW 3RL	5	4-5	4-5	G
	POPNIL ORANGE RL	5-6	4-5	4-5	G
	POPNIL RED PR	5	4-5	4-5	G
	POPNIL SCARLET LN	5	4	4	G
	POPNIL BORDEAUX PB	5-6	4-5	4-5	P
	POPNIL DARK BLUE PR	6	5	5	G
	POPNIL BLUE M5G	6-7	3	4	G
	POPNIL BROWN PBL	5-6	5	4-5	G
	POPNIL BROWN 2RL	5-6	5	4-5	G
	POPNIL OLIVE PGL	5	4-5	4-5	G

2%

5%

DYESTUFFS FOR SILK		FASTNESS PROPERTIES			
		Light	Washing	Perspiration	Dischargeability
	POPNIL GREY PBL	5-6	5	4-5	G
	POPNIL * BLACK SRL	5-6	4-5	4-5	F

2%

5%

\*3% & 6%

**Non-Dischargeable  
Dyes on  
Silk**

	Popsilk Yellow BGND * Popzol Brown MR
	Popsilk Yellow RRIND Conc. * Popzol Brown MR
	Popsilk Golden Yellow BRND * Popzol Brown MR
	Popsilk Orange SGND * Popacid Green VS
	Popsilk Scarlet GND * Popacid Green VS
	Popsilk Red GRND * Popacid Green VS
	Popsilk Red 3BND * Popacid Green VS
	Popsilk Pink RND Conc. * Popacid Green VS
	Popsilk Pink 5RND * Popsilk Patent Blue AS
	Popsilk Rhodamine BND * Popacid Green VS

4% Shade

\* Ground Dyed with

**Non-Dischargeable  
Dyes on  
Silk**

	Popsilk Bordeaux BND * Popacid Green Vs
	Popsilk New Maroon VND * Popacid Green VS
	Popsilk Purple 3RND * Popacid Green VS
	Popsilk Red 10BND * Popacid Green VS
	Popsilk Mustard GSND * Popacid Green VS
	Popsilk Rust ND * Popacid Green VS
	Popsilk Rust Brown GND * Popacid Green VS
	Popsilk Turquoise Blue 6GND * Popdischargeable Blood Red
	Popsilk Blue BLR * Popsilk Scarlet N
	Popsilk Blue BLR 200% * Popsilk Scarlet N

4% Shade

\* Ground Dyed with

**Non-Dischargeable  
Dyes on  
Silk**

	Popsilk Violet 4BND Conc. * Popacid Green VS
	Popsilk Violet RND Conc. * Popacid Green VS
	Popsilk Olive 3GND * Popsilk Scarlet N
	Popsilk Green 5BND * Popzol Brown MR
	Popsilk Navy Blue 2RND * Popsilk Scarlet N
	Popsilk Navy Blue 3RND * Popsilk Scarlet N
	Popsilk Dark Brown GRND * Popacid Green VS
	Popsilk Black END * Popsilk Scarlet N

4% Shade

\* Ground Dyed with