



# EUROMIN EXF

*EXF Series for Excellent water fastness  
For your valuable fabric.*

**49**  
YEARS  
ANNIVERSARY

Phisit Group 

COLOUR **THE WORLD**  
SINCE 1973

ISO9001:2015 Certified



Bluesign Certified



**PHISIT INTERGROUP CO., LTD.**



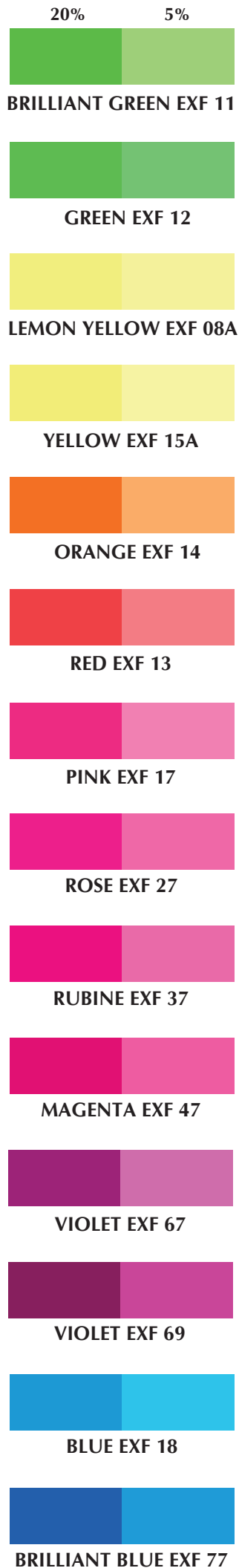
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Color Fastness to EUROMIN EXF	Light	Washing	Rubbing dry/wet	Perspiration	Saliva	Dry Cleaning	Heat
Brilliant Green EXF 11	4-5	4	4-5/3	3-4	3-4	4	4-5
Green EXF 12	4-5	4	4-5/3	3	3-4	4	4-5
Lemon Yellow EXF 08A	4-5	4	4-5/3	3-4	3-4	4	4-5
Yellow EXF 15A	3-4	4	4-5/3	3-4	3-4	4	4-5
Orange EXF 14	3	4	4-5/3	4	4	4	4-5
Red EXF 13	3	4	4-5/3	4	4	4	4-5
Pink EXF 17	3	4	4-5/3	4	4	2-3	4
Rose EXF 27	2-3	4	4-5/3	4	3-4	4	3-4
Rubine EXF 37	2-3	4	4-5/3	4	3-4	4	3
Magenta EXF 47	3	4	4-5/3	4	3-4	4	4
Violet EXF 67	2-3	4	4-5/3	4	3-4	3-4	2
Violet EXF 69	2-3	3	4-5/3	3-4	3	3	4
Blue EXF 18	5	5	4-5/4	5	5	4	4
Brilliant Blue EXF 77	1	5	4-5/3	5	5	4	4

Print on Cotton Knit 10 % owp. —> Dry—> Curing 150°C x 3 min.

Fastness Testing Method	Evaluated	Grade
Light : ISO 105-B02 (30 hr.)	Color Change	1-8
Washing : ISO 105-C03 (60°C X 30 min.)	Color Stain	1-5
Rubbing : ISO 105-X12	Color Stain	1-5
Perspiration : ISO 105-E04	Color Stain	1-5
Saliva : GB/T 18886	Color Stain	1-5
Dry Cleaning : ISO 105-D01	Color Change	1-5
Heat : Oven 180°C X 1 min.	Color Change	1-5

\*For full range of fastness properties please visit [www.phisit.com](http://www.phisit.com)

Remark:

1. Adequate fastness can be acquired by curing.
  2. Sometimes for some cases, after printing, problems of blocking, cracking, etc. May be caused by handling of fabrics.
  3. Avoid freezing and also avoid keeping the goods above 25°C.
  4. Careful testing and enough investigation before each application are highly recommendable.
- The printing outcome may be variable depending on condition of process. Therefore, sufficient and precaution examination before each application should be made.

# EUROMIN EXF

EUROMIN EXF is highly performance pigment colors which preparation by PHISIT INTERGROUP CO., LTD. to meet the rising quality requirements in various textile application.

EUROMIN EXF pigment colors perform fine dispersion stability, defined particle size, brilliancy and wide range of color shades. EUROMIN EXF possesses excellent water fastness. EUROMIN EXF pigment colors are high reproducibility, reliability can be obtained optimum coloring results by careful selection of EUROMIN EXF pigment colors.

EUROMIN EXF offered in the production lines are not intentionally added raw materials any of the prohibited substances above the limit of textile standard. It may be said that EUROMIN EXF should comply with the standard listed in GOTs, ZDHC-MRSL, REACH and OEKOTEX .etc

## Application

### 1. Printing recipe

printed colors illustrated in this pattern card were produced using the following general printing recipe. Pigment printing can affect fastness properties, shade and brilliancy in many different ways. Therefore for obtain the required qualities printing results ensure the properties of all auxiliaries in print paste.

#### Stock Thickening

Water (Demineralised)	X	part
Emulsifier E-650	0.5	part
White - spirit	5	part
Synthetic thickener (Acrylate - based)	1.5	part
Polyacrylate binder	10 ~ 20	part
Catalyzer P	2	part
25% Ammonia	2	part
<b>Total</b>	<b>100</b>	<b>part</b>

#### Printing paste

EUROMIN EXF	Y	part
Stock thickening	100 -Y	part
<b>Total</b>	<b>100</b>	<b>part</b>

Printing — Drying (2 min at 100°C) — Curing (3 min at 150°C)

### 2. Padding recipe

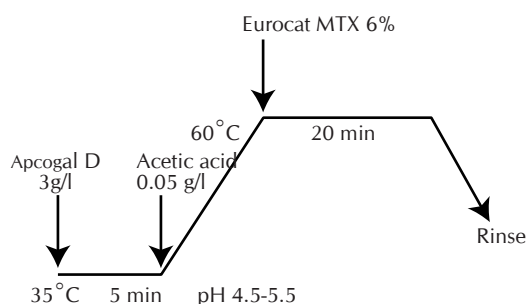
EUROMIN EXF	A	g/litre
Polyacrylate binder	100 ~ 200	g/litre
Antimigrating agent	5	g/litre
Catalyzer P	10	g/litre
Water (Demineralised)	B	g/litre
<b>Total</b>	<b>1</b>	<b>litre</b>

Padding — Predry — Curing (Hot air at 160°C for 2 min)

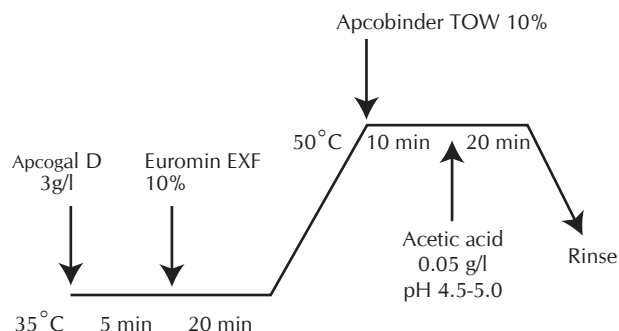
## Pigment Fluorescent EXF dyes for exhaust dyeing

### Dyeing Process

#### A: Cationization



#### B: Dyeing + Fixation



\*After wet process —> Extraction —> Tumble dry (120°C) the garment for curing the dyeing.