



DESIGN THAT SHINES,  
VISIBILITY THAT PROTECTS

# MAGAZINE

FASHION FUSION 2026  
SPORT • STYLE • INNOVATION

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One Design.  
Two Appearances.

Designing  
With Light

Dynamic  
Light Effects

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**RheoLight<sup>™</sup>**  
Crystal Glass Pigments

## EDITORIAL

What if screen-printed fashion designs could remain subtle in everyday light, yet come to life when illuminated? RheoLight Crystal Glass Pigments introduce a new visual dimension to textile screen printing, enabling everyday fabrics to become dynamic, light-responsive fashion statements.

RheoLight consist of perfectly round microspheres supplied in a liquid dispersion, which can be incorporated into screen printing inks. When exposed to light sources such as sunlight or artificial lighting, including spotlights, incoming light enters the microspheres and is redirected back toward its source, creating a controlled reflective response that adds depth and presence to printed surfaces.

RheoLight integrates seamlessly into water- and solvent-based screen printing inks while maintaining color accuracy and fabric softness. Compatible with common textile substrates and industry-standard production processes, allowing easy integration into existing workflows.

This magazine serves as inspiration for designers, brands, screen printers, and ink formulators. It guides you from early-stage concept development to finished screen print examples as they appear in real-life applications and demonstrates how contrast can be used as an effective design tool to control the visual impact of RheoLight, creating hidden designs and messages.

Explore how RheoLight offers a new approach to screen print design, where contrast and light interaction create designs that offer more than meets the eye. Consider this your all-access pass to the color candy store. With RheoLight, it is impossible to leave with just one idea.

Jacques Arthur Knoote  
Director, Innovation

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## DESIGNING WITH LIGHT

Hidden designs are a powerful fashion tool, introducing as a new visual experience in screen printing. Under normal lighting conditions, graphics remain subtle or nearly invisible. When exposed to direct or changing light, these designs become visible through the reflective response of RheoLight, creating controlled contrast.

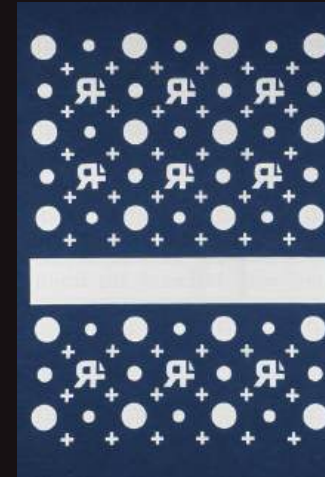
From dynamic light effects and graphics to functional highlights, RheoLight offers a new approach to screen print design, allowing printed surfaces to interact with their environment rather than relying on color contrast alone.

All examples in this publication show the same printed samples under ambient light and directed illumination to clearly demonstrate how light return alters perceived contrast.



### STRIKING SILVER

Combination of two prints: silver metallic with RheoLight and silver metallic without RheoLight on a blue fabric (95% cotton / 5% elastane). See page 16



### AQUAMARINE

Combination of two prints: blue metallic with RheoLight and blue metallic without RheoLight on a dark blue fabric (85% polyester / 15% elastane). See page 17



### POWERFUL BLACK

Combination of two prints: pearl black with RheoLight and pearl black without RheoLight on a gray fabric (95% cotton / 5% elastane). See page 13

### EMERALD GREEN

Single print green metallic print with RheoLight on a green fabric (85% polyester / 15% elastane). See page 18

All presented designs use a formulation containing 40 wt% RheoLight water-based CSL grade (D50 5 - 15 um, D90 7 - 20um) and were printed using a 64-mesh screen. Further formulation and application details are available in the Application Guide via the QR code on page 20.

## ONE DESIGN. TWO APPEARANCES.

To achieve this effect, contrast must be carefully managed within the design. Simply screen printing an ink containing RheoLight does not automatically result in a strong visual effect.

Across these pages, the RheoLight ColorLab optimized ink formulations, layering, and contrast levels to enhance visual impact for each design. By balancing these parameters, prints respond consistently to light while remaining neutral under normal conditions. All developed colors shown are part of the RheoLight Signature Colors.



### ECLIPSE SILVER

Combination of two prints: dark grey metallic with RheoLight and dark grey metallic without RheoLight on a black fabric (95% cotton / 5% elastane). See page 8 & 19



### AURELIA GOLD

Combination of two prints: gold with RheoLight and gold without RheoLight on a pink fabric (95% cotton / 5% elastane).

### POWDER PINK

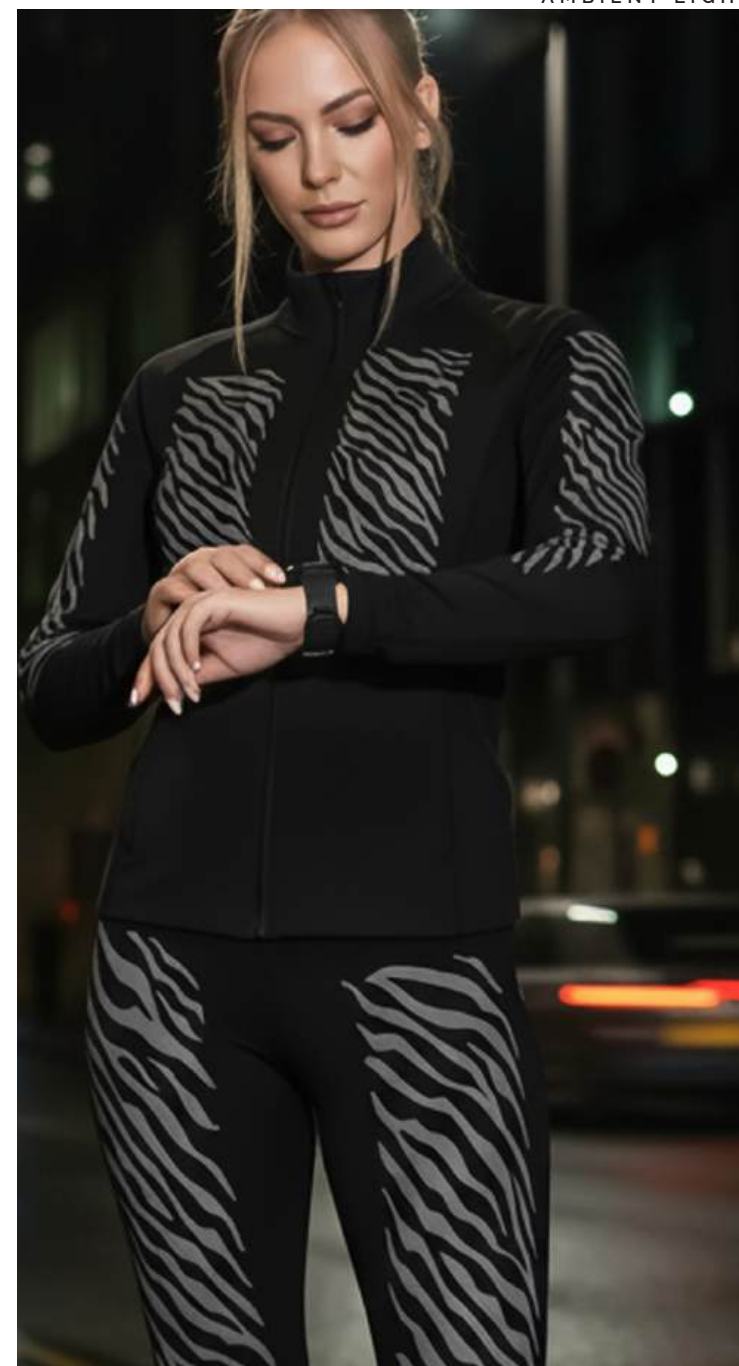
Single print pink metallic print with RheoLight on a pink fabric (95% cotton / 5% elastane). See page 14

# COUTURE REDIFINED

WHERE PATTERN MEETS LIGHT



AMBIENT LIGHT



## ICONIC IN EVERY LIGHT SETTING

This design uses a dark gray metallic ink formulation containing aluminum pigment and RheoLight, printed onto a black sportswear garment to establish controlled contrast.

In low light, the dark gray print and black fabric remain closely aligned. When illuminated, RheoLight enhances reflectivity within the metallic layer, allowing the motif to stand out with a clear, light-responsive effect.



SUNLIGHT

SUNLIGHT

# WORLD'S WHITEST WHITE

SILENT IN SHADE, STRIKING IN LIGHT



AMBIENT LIGHT

## BEYOND VISIBLE WHITE

Diamond White is the world's first true white, only possible with RheoLight Crystal Glass Pigments and engineered to maintain visual whiteness across changing light conditions. Screen printing white on white creates a hidden design that remains unnoticeable under normal lighting.

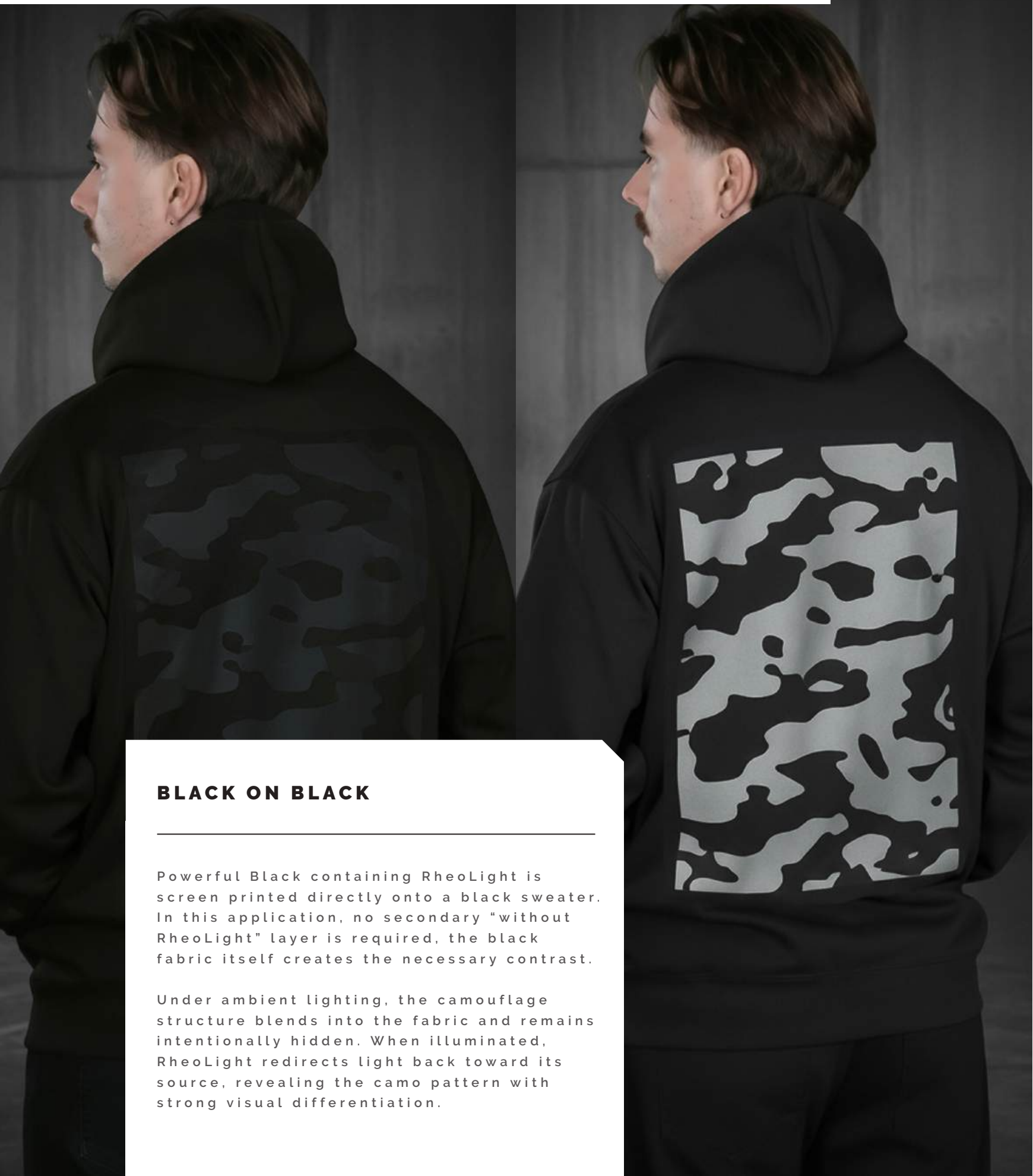
RheoLight-infused inks enhance directional light return, increasing perceived whiteness under illumination. In ambient light, the surface remains clean and stable, without drifting or dulling. When exposed to direct light, the RheoLight component becomes visually dominant, overpowering the white base fabric and revealing the design with strong visual impact.



SPOT/FLASH LIGHT

# POWERFUL BLACK

## SAME BLACK. TWO EXPRESSIONS



### BLACK ON BLACK

Powerful Black containing RheoLight is screen printed directly onto a black sweater. In this application, no secondary "without RheoLight" layer is required, the black fabric itself creates the necessary contrast.

Under ambient lighting, the camouflage structure blends into the fabric and remains intentionally hidden. When illuminated, RheoLight redirects light back toward its source, revealing the camo pattern with strong visual differentiation.

### BLACK ON GREY

The same black ink is applied to a grey fabric, combining black with and without RheoLight within the same camouflage design. In ambient light, the natural contrast of the grey fabric keeps the camo visible yet controlled. Under spot or flashlight illumination, the RheoLight-infused areas increase in reflectivity, creating clear separation within the pattern and enhancing the hidden structure. Together, these two applications demonstrate how substrate color and contrast determine the visibility threshold of the RheoLight effect.

SPOT/FLASH LIGHT



AMBIENT LIGHT



**LUMINOUS BY DESIGN**  
SUBTLE. CONTROLLED. BALANCED



CAR HEADLIGHT



SPOT/FLASH LIGHT

**SOFT IN APPEARANCE. ALIVE IN LIGHT**

Powder Pink is a metallic-based ink formulation that demonstrates how light-responsive screen printing can be applied within light-toned designs while preserving color harmony. The ink is carefully color-matched to the fabric to maintain low contrast under normal lighting conditions.

This approach preserves the gentle character of the pink tone while allowing light to play a functional role. The result is a refined expression where elegance and controlled visibility are carefully balanced.

# NOW YOU SEE ME

## HIDDEN MESSAGE



This design combines a silver metallic ink with and without RheoLight printed on a denim jacket.

The small image shows the jacket under ambient lighting, where the RheoLight effect is inactive and the graphic elements, such as dots and plus signs, appear partly visible. The large image shows the same design under direct illumination, activating the RheoLight areas within the design and revealing the hidden message.



SPOT/FLASH LIGHT



AMBIENT LIGHT

### CAMOUFLAGE IN MOTION

The Aquamarine formulation features a metallic blue ink, printed both with and without RheoLight, integrated into a single camouflage design on a blue fabric.

In ambient light, the pattern blends seamlessly with the blue fabric, maintaining a subtle appearance. When illuminated, the areas with RheoLight highlights the camouflage design, and bringing it to life.

# IN THE SPOTLIGHT



## PERFORMANCE AND ELEGANCE REVEALED

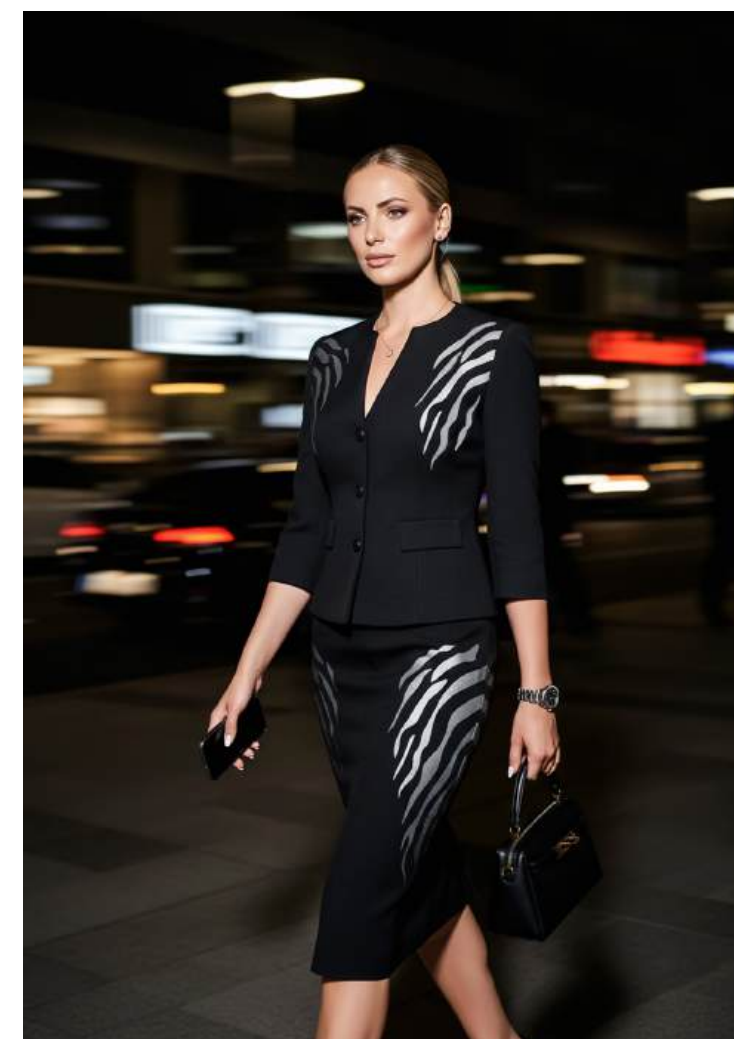
Emerald Green is a green metallic ink containing RheoLight, applied to a matching green fabric. In ambient light, the composition appears refined and sculptural.

Under spotlight, RheoLight intensifies contrast and sharpens the design's contours. The result moves between sophistication and performance: subtle elegance in ambient light, vividly revealed when illuminated.

AMBIENT LIGHT



AMBIENT LIGHT



SPOT/FLASH LIGHT

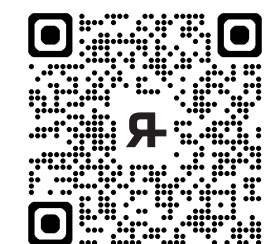
## EXPLORE

With RheoLight, screen printing gains a new visual dimension in design freedom, allowing designs to appear by intent rather than color alone. From subtle tone-on-tone effects to light-responsive designs, RheoLight enables design that remain unnoticed in normal lighting and become highly visible under illumination. This opens-up new possibilities for both creative and functional applications.

### Other Industries

RheoLight is suitable for a wide range of applications beyond textiles, including automotive and mobility coatings, leather/artificial leather and more.

# TESTED TO PERFORM IN EVERY INDUSTRY



Ready to take the next step? Scan the QR code to discover how RheoLight can be integrated into your application and explore its potential within your own systems and processes. Visit the "Contact Us" section to locate with your local distributor and request a sample.

### PRODUCT SPECIFICATION

All screen print examples in this publication feature RheoLight™ CSL grade.

Particle size D50:	5 - 15 um. D90: 7 - 20um
Particles within size range:	> 99%
Optical properties:	Isotropic
Color:	Semi-transparent
Luster:	Adamantine
Diaphaneity:	Translucent
Density (dispersion):	1.9 g/cc ± 0.3 g/cc
Melting point:	> 1,200 °C

# COLOPHON

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**Screen-print Production:** De Kijm | Bijzonder drukwerk B.V. The Hague, The Netherlands. [www.dekijm.nl](http://www.dekijm.nl)

## Real-World Context

On selected pages, certain images are AI-generated for visualization purposes to illustrate how a design incorporating RheoLight may appear in a finished product. Although digitally created, the RheoLight Effect shown is based on real screen-printed samples and is intended to represent typical performance under comparable lighting conditions.

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