



Series Light - XXX

Powders with photo luminescent properties



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1. PRODUCT FEATURE

The main feature of the Light series is photo-luminescence: these transparent powders indeed, thanks to special additives, can glow in the dark after exposure to light, thus making the surface photo luminescent.



Figure 1: Example of possible usage of the Light powder series.

2. TECHNICAL INFORMATION

● TECHINAL DATA

Chemical Nature	POLYURETHANE MODIFIED
Class resistance	INDOOR ONLY
Yield (Surface/mass)	13 m ² /kg
Specific Weight	1,20 ± 0,09 g/cm ³

● APPLICATION AND CURING CYCLE

Available for corona charging.

Curing Cycle: **20 minute at 200°C** (metal temperature)

Recommended thickness: 60 µm

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• MECHANICAL PROPRIETIES

Test	Standard reference	Result
Buchholz	ISO 2815	ok
Adhesion	ISO 2409	ok
Bending	ISO 1519	ok, no loss of adhesion
Direct Impact Test	ASTM D2794	ok, no loss of adhesion

The Powders of the *Light* series have been formulated in 3 different colour for the remission phase of the absorbed light:

- Light-001 → YELLOW coloration in the dark
- Light-002 → GREEN coloration in the dark
- Light-003 → BLUE coloration in the dark

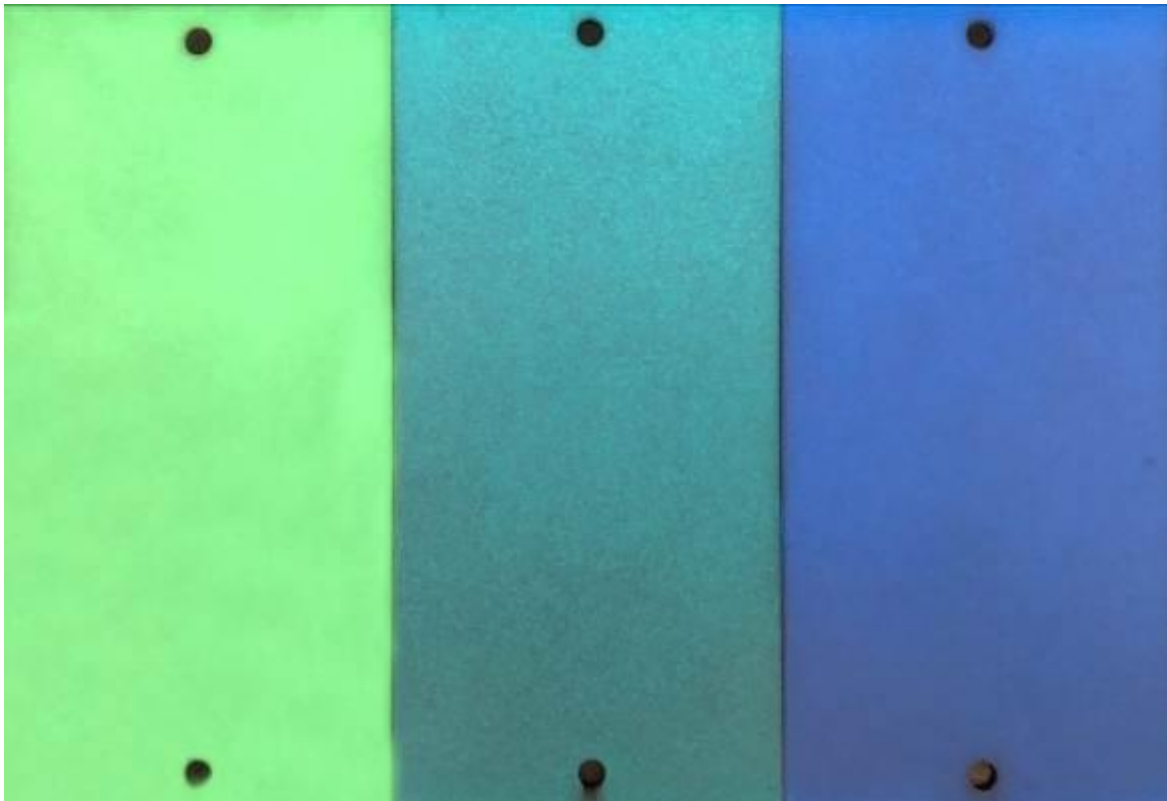


Figure 2: Light-001 (Yellow) – Light-002 (Green) – Light-003 (Blue)

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3. VARIANTS

On customer's request, it's possible to produce powders of this series in the following version:

- Antimicrobial;
- Low cross-linking temperature;
- Texture;
- Glossy.

4. PRODUCT APPLICATION

To enhance at the best, the characteristics of these powders, double coating of paint are recommended:

- First Layer: PE 411 (White polyester powder), in order to 100% enhance the photo luminescent properties of the *Light* series powders;
- Second Layer: Light series powders, colourless and transparent.

N.B. – The photo luminescent must be preceded by adequate exposure to light sources: 10 minutes under artificial lights, or even just 5 minutes in natural day light, are enough for an impressive luminescence. The effect is immediate and steadily intense for one hour, and keeps on for up to 10 hours at lower intensity.

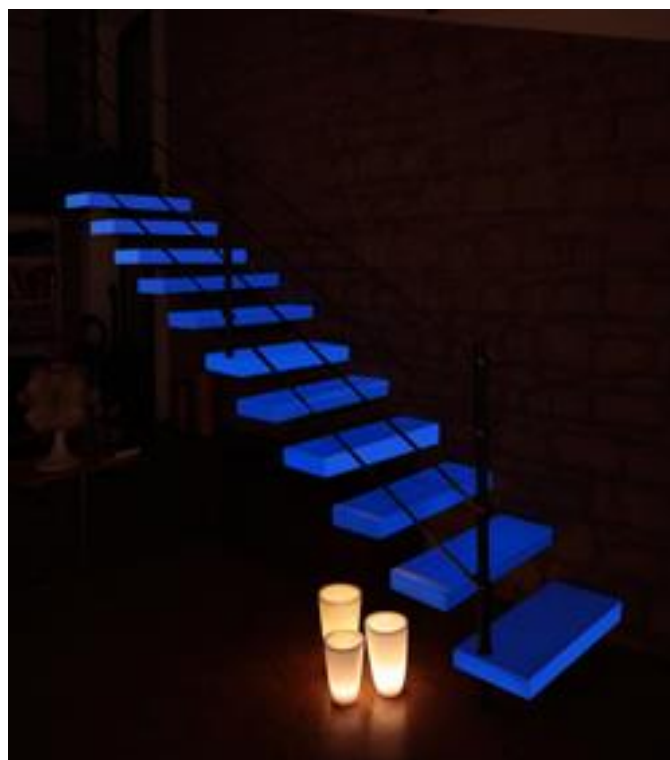


Figure 3: Example of possible usage of the *Light* series

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5. ACCELERED WEATHERING TEST

We tested in laboratory, using the accelerated weathering test, the weathering resistance of the powders of the Light series for use in outdoors environments. The test has been performed on sample of PE 411 + Light-001 and PE 411 + Light-002 for a period of 300 hours.



Figure 4: Sample after 300 hours of exposition

CONCLUSION

After thorough analysis of the result obtain by the accelerated weathering test (figure above), it has been determined that the powders of the Light series are unsuitable for use in outdoor environments but only for indoor use.

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6. POSSIBLE USAGE

Besides decorative design for original and striking solution, these powders are used to make written signboards stand out. But there is no limit to the possible uses of powders as special as those of the *Light* series: indeed, unlike almost all powders coating, this product not only determines the outer aspect of the coated object, but can also give live to breath-taking effects.



Figure 5: Examples of possible usage of powders of the Light series.



Dedicate marketing presentation:

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