

# Phosphorescent LIGHTIVE Coat®

Blue-green Light Emission coating for long duration  
Excellent quality and cost-performance ever



Above photographs show application example according to the International Standard (Draft) and Construction Standard RS-6-112 of New York City.

The LIGHTIVE COAT is a phosphorescent coating material with excellent performance of blue-green light emission and low cost.

# LIGHTIVE COAT PRODUCTS LINE-UP

UV type: Hardening by UV ray of metal halide lamp. No curing is required because hardening will be achieved in very short time.

Excellent physical performance is reserved with hard coating.

MATERIAL	Type No.	FEATURES
Anchor-White	001	Undercoat for effective light emission and enforcement of stickiness onto the base material
Phosphorescent Coat-H	002	Phosphorescent ink/coat, Hardness 5H, All purpose on 001
Phosphorescent Coat-S	003	-ditto- , Hardness 2H, -ditto-
Phosphorescent Coat-SS	004	-ditto- , Hardness H , -ditto-
Phosphorescent Coat-M	005	-ditto- , Hardness 2H, for metal base
Clear top coat	006	for anti-stain, anti-erosion

Aqueous type: Good for working environment because no organic solvent is used.

MATERIAL	Type No.	FEATURES
Emulsion sealer	021	Undercoat for effective light emission and enforcement of stickiness onto the base material
Emulsion, Phospho. Coat	022	Phosphorescent ink/coat, for outside of concrete mortar
Emulsion, top coat	023	For higher physical performance, anti-stain, anti-erosion
Aqueous sealer	026	Undercoat to enforce phosphorescent performance
Aqueous Phospho. Coat.	027	Phosphorescent ink/coat, for paper, plastics (PC, PS)

Dual liquid type: Solvent type of higher physical performance. Since base liquid contains hardening agent, stable and hard coat is performed.

MATERIAL	Type No.	FEATURES
Anchor white of dual liquid type	031	Undercoat for effective light emission and enforcement of stickiness onto the base material
Phosphorescent coat of dual liquid type	032	Light accumulating coat, Hardness 3H, all purpose for metal, concrete and plastics.
Top coat of dual liquid type	033	for anti-stain, anti-erosion
Hardening agent of dual liq.	035	Coat hardening by mixing 7% into base liquid.

Single liquid baking type: Hard coating of high physical performance by baking on the metals.

MATERIAL	Item No.	FEATURES
Anchor white of single liquid baking type	041	Undercoat for effective light emission and enforcement of stickiness onto the base material
Phos. coat of baking type	042	Phosphorescent ink/coat, Hardness 3H, for metals
Top coat of baking type	043	for anti-stain, anti-erosion

## Others

MATERIAL	Item No.	DESCRIPTION
Additive	091	Fluoric resin of anti-stain, 5% mix to base liquid
Solvent	T-920	Solvent for dual liquid type.
Solvent	T-965	Solvent for baking type

**LIGHTIVE COAT Light Remaining Brightness(mcd/m<sup>2</sup>), Coat thickness:350 μ**

Time duration (minutes)	(mcd/m <sup>2</sup> )
5	1448
30	168
60	65
180	19
360	10

## For Environmental Creation of Lighted Facilities with Safety and Energy conservation

For Emergency evaluation in darkness at accidents.

- Power failure: Self luminescence (Phosphorescent light) shows the way.
- CO<sub>2</sub> reduction effect because no power source is required.
- No electric loss where UV is available.
- Paint (ink) makes easy for application.

Phosphorescent paint;

§ As issues of the paint, it contains rare earth on aluminium oxide;

- No resistant for water, hydrolysis occurs by contacting with water.
- Gas decomposition occurs by contacting with CO<sub>2</sub>.
- Hard coat is created by contacting with organic monomer.

§ It sediments and coagulates easily, then forms a block because rare earth is combined with Strontium.

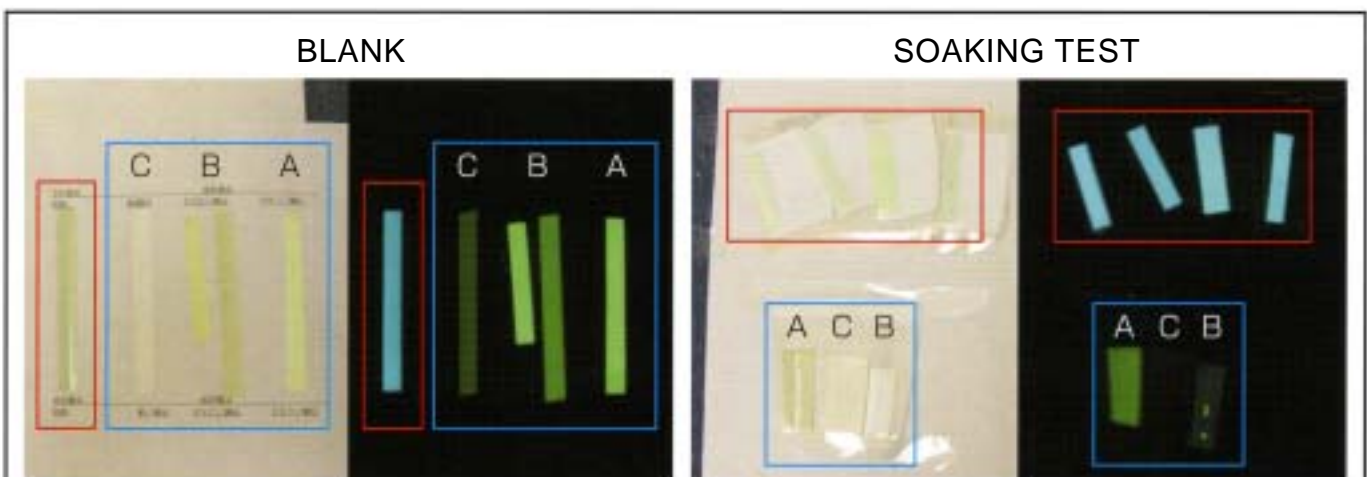
§ Specific gravity of pigment is 3.9, it is separated and settled easily.

Solutions of issues;

§ Solutions of issues and points of development;

- Surface of phosphorescent pigment is treated to prevent hydrolysis of aluminium and water, reaction with CO<sub>2</sub> and organic monomer.
- Special dispersion agent is used to prevent separation, sedimentation and coagulation.
- Developed to keep long duration of phosphorescent and brightness. (8mcd/350 μ after 12 hours)
- 2000hours of weather-proof performance is cleared.
- It provides unprecedented performance of anti-stain and anti-erosion.

**Possible for outdoor use and both of paint and screen-printing is available.**



Red frames show our products and Blue by others

Test method

- Phosphorescent test pieces are soaked in water for several days.

Evaluation

- Samples of green A, B and C of products by others has occurred hydrolysis after one month and has lost phosphorescent performance.

According to the Construction Standard of New York City RS-6-112, Border line on floor (2-2-4), Indication of Door Knob (2-2-9) and Continuous guide line painting (2-3-2)



LIGHTIVE COAT test application on the stop line (Daytime and Night time)



Application for frame of shutter switch at Narita Airport garage

Application for steps as per N.Y. construction standard RS-6-112, 2-2-1 (Steps) and 2-2-4 (Landing)



Manufacturer



Noto Proworks Co., Ltd.

Planning & Development

MIA Planning Co., Ltd.