

# NUBIAN® COLORS & ORIENT® LPI-1

FAKUMA08-00341-07

High Performance Colorant &amp; Keeps Bright Coloration

Colorants for Plastics: PA6 , PA66 , PC etc.

Product	Chemical Structure	COLOR	Recommended Content	Decomp Temp.*	Loss on drying	Average grain diameter	
<b>NUBIAN® COLORS</b>	<b>YELLOW PA-7100</b>	Quinophthalone	 YELLOW	0.03~0.2%	402°C	1.2%	22.4 μm
	<b>RED PA-5300</b>	Anthrapyridone	 RED	0.05~0.2%	281°C	2.7%	10.6 μm
	<b>RED ES-5352</b>	Anthrapyridone	 RED	0.05~0.2%	250°C	1.9%	18.1 μm
	<b>GREEN PA-5501</b>	Anthraquinone	 GREEN	0.05~0.2%	277°C	1.7%	43.3 μm
	<b>BLUE PA-5600</b>	Anthraquinone	 BLUE	0.05~0.2%	333°C	2.2%	95.0 μm
<b>ORIENT® LPI-1 (Lab.)</b>	Azine	 <b>Fluorescence PINK</b>	0.001~0.1%	403°C	—	—	

\* Decomp. Temp. : Starting point of Decomposition (TG/DTA)

Applying the above colorants to components for laser welding may interfere with joint patents of Orient Chemical Industries, LTD. And E.I. DuPont.

The data listed above are evaluation results only. We do not guarantee the measured values as product specification.

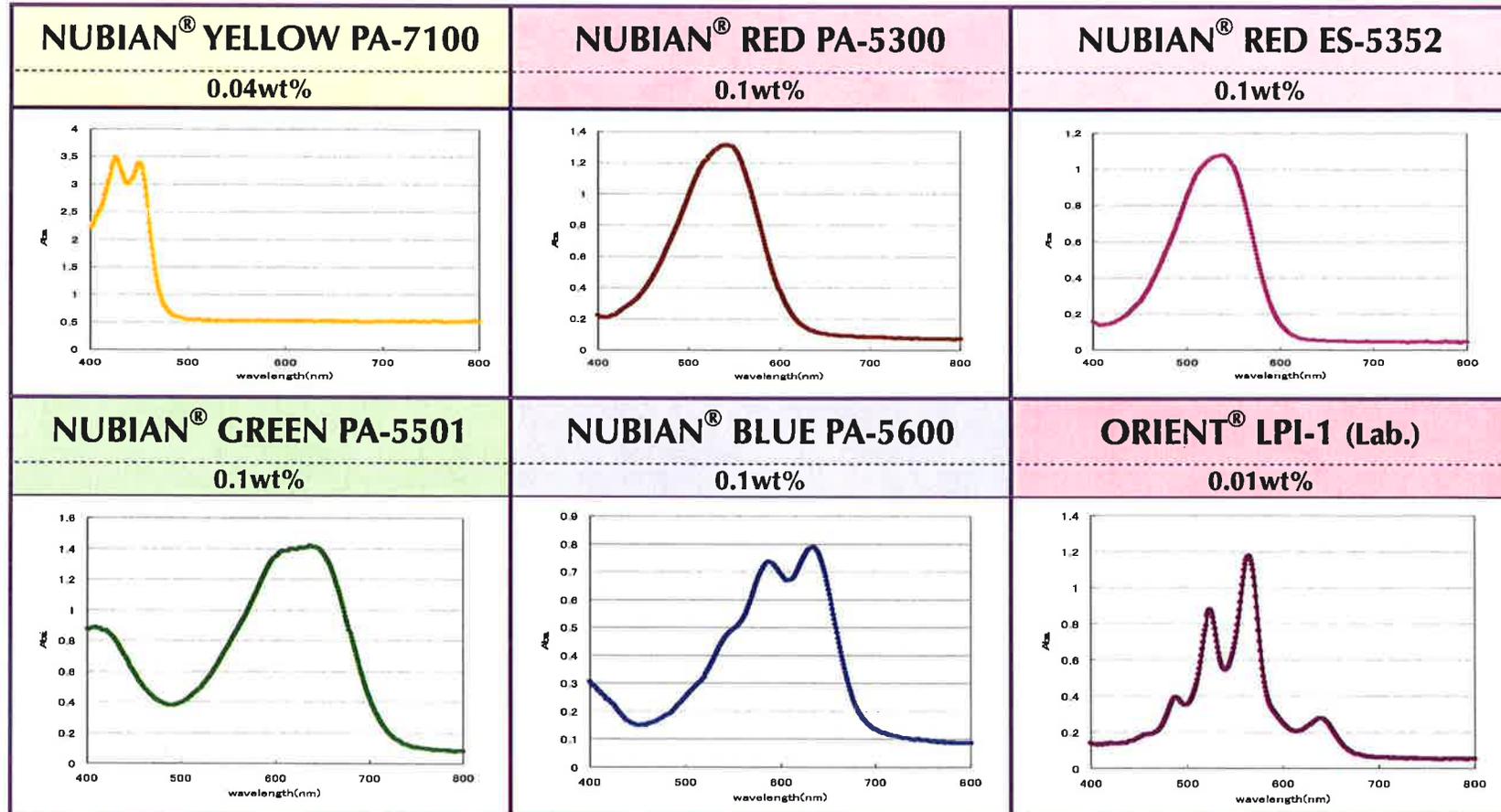
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 URL : [www.orientchemical.com\(JAPAN\)](http://www.orientchemical.com(JAPAN)) / [www.orient-usa.com\(USA\)](http://www.orient-usa.com(USA)) / [www.orient-eu.nl\(EU\)](http://www.orient-eu.nl(EU))

# NUBIAN® COLORS & ORIENT® LPI-1

FAKUMA08-00341-08

High Performance Colorant & Keeps Bright Coloration



Absorption spectrum of 1mm thick polycarbonate

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## Real Black & Piano Black

FAKUMA08-00341-04

High Performance Colorant & Jet Black Coloration

Colorants for Plastics: PC , ABS , PMMA , HIPS etc.

### General Properties

Sample#	Real Black		Piano Black
	SOC-L-0009	SOC-L-0011	SOC-L-0016
Color	Black	Black	Bluish Black
pH	5.4	6.5	6.1
Loss on drying	0.1%	0.2%	0.1%
Ignition residue	0.1%	0.2%	0.1%
Decomp. Temp.	347°C	371°C	332°C
Cd	2ppm or less	2ppm or less	2ppm or less
Cr	4ppm or less	4ppm or less	4ppm or less
Pb	5ppm or less	5ppm or less	5ppm or less
Hg	0.1ppm or less	0.1ppm or less	0.1ppm or less

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# Real Black & Piano Black

FAKUMA08-00341-05

High Performance Colorant &amp; Jet Black Coloration

## Polycarbonate

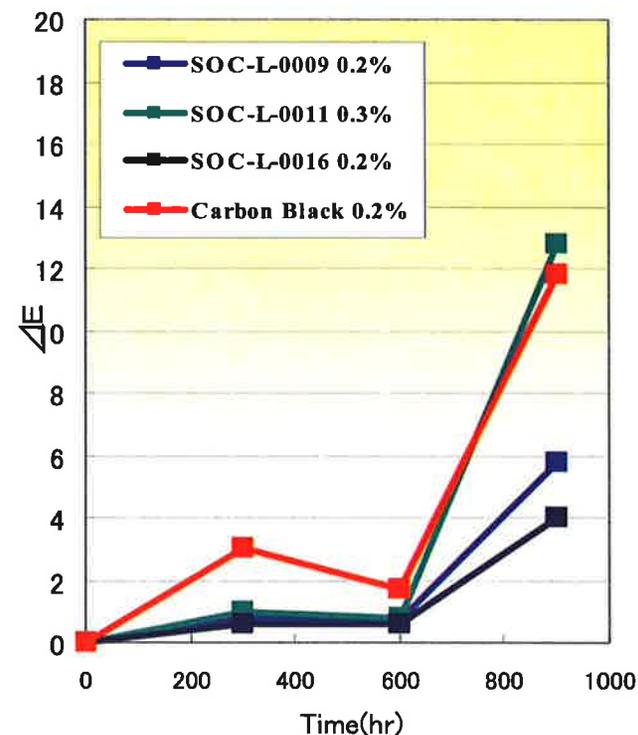
 "Iupilon<sup>®</sup> S-3000R" [Mitsubishi Engineering-Plastics Corporation]

Plate Thickness 1.5mmt	Real Black		Piano Black	
	SOC-L-0009	SOC-L-0011	SOC-L-0016	
Content	0.2%	0.3%	0.2%	
Hue	L*	0.7	1.0	0.6
	a*	0.1	0.1	0.1
	b*	-0.2	0.3	0.0
Heat Resistance <sup>*1</sup>	$\Delta E=0.4$	$\Delta E=0.3$	$\Delta E=0.4$	
Bleeding <sup>*2</sup>	Good	Good	Good	

\*1--Test Condition of the heat resistance by injection machine:290°C/10min

\*2--Bleeding Test:140°C x 3hrs

### ◆ Light Resistance



Test Condition : Xenon fade meter; BST=83°C

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# Real Black & Piano Black

FAKUMA08-00341-06

High Performance Colorant &amp; Jet Black Coloration

## Transparent ABS

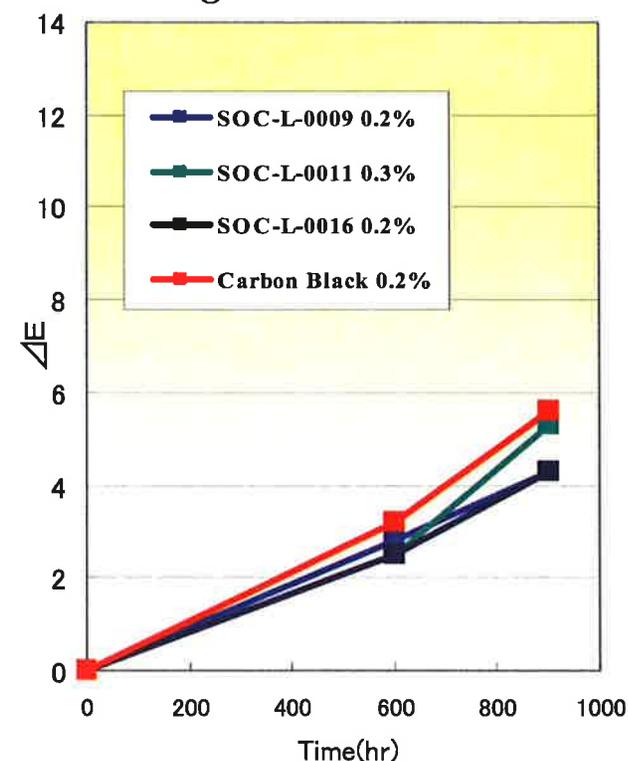
"KRALASTIC® ST-100" [NIPPON A&amp;L INC.]

Plate Thickness 1.5mm	Real Black		Piano Black	
	SOC-L-0009	SOC-L-0011	SOC-L-0016	
Content	0.2%	0.3%	0.2%	
Hue	L*	2.5	3.1	3.8
	a*	0.2	0.3	0.3
	b*	-1.8	-1.0	-2.8
Heat Resistance <sup>*1</sup>	$\Delta E=1.6$	$\Delta E=2.8$	$\Delta E=0.8$	
Bleeding <sup>*2</sup>	Good	Good	Good	

\* 1--Test Condition of the heat resistance by injection machine:220°C/10min

\* 2--Bleeding Test:100°C x 3hrs

### ◆ Light Resistance



Test Condition : Xenon fade meter; BST=83°C

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