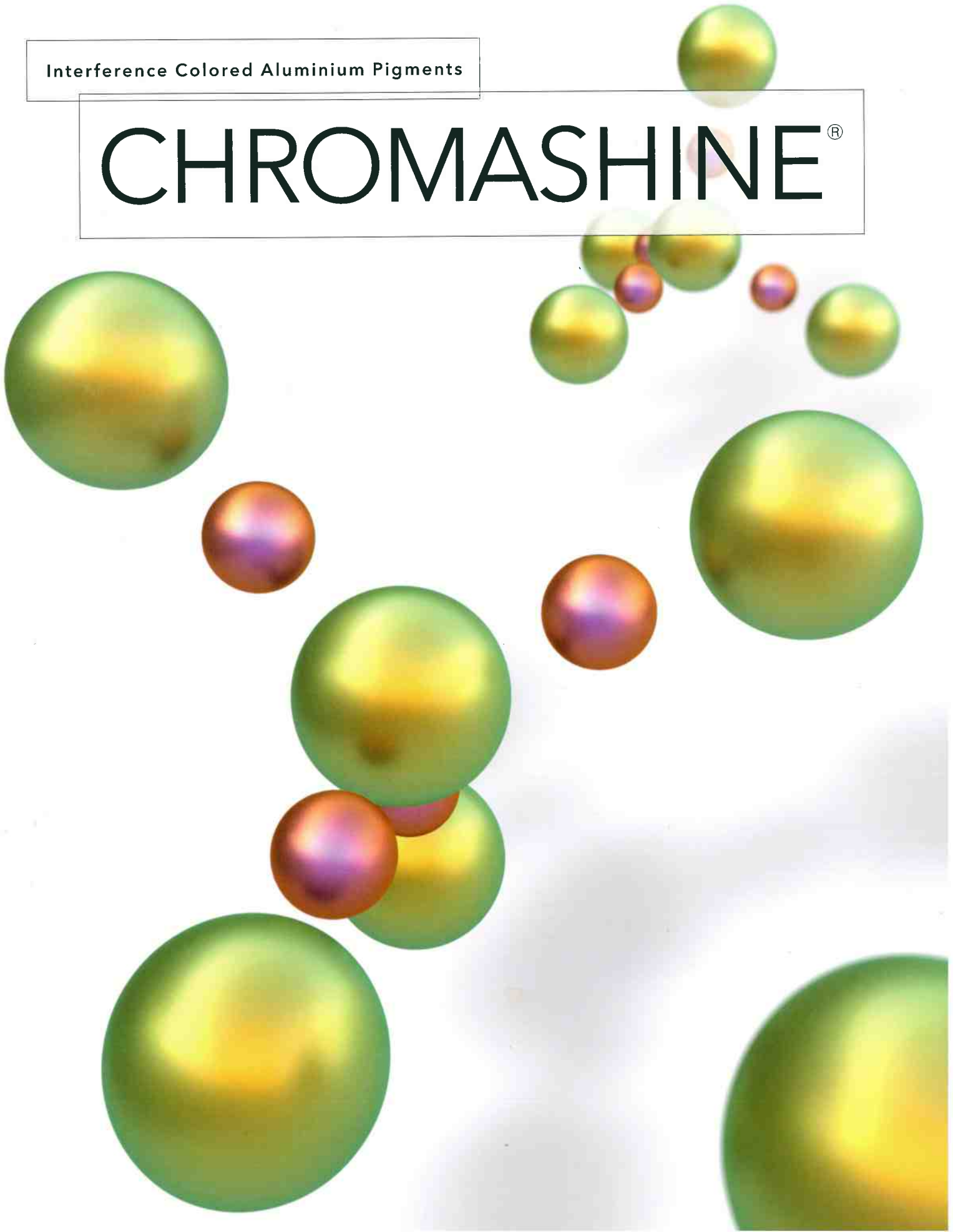


Interference Colored Aluminium Pigments

# CHROMASHINE®



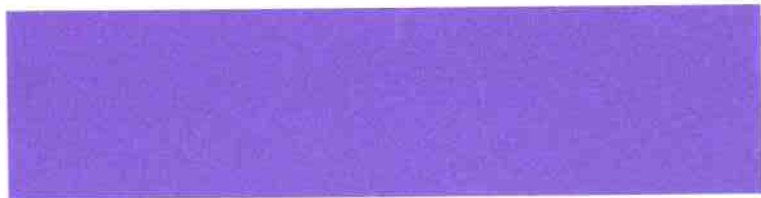
# CHROMASHINE® lineup

*Appearance*

## **RPK20-X**

*Highlight : Violet*

*Shade : Dark Orange*



*Appearance*

## **BL20-X**

*Highlight : Dark Blue*

*Shade : Violet*



*Appearance*

## **MBL20-X**

*Highlight : Light Blue*

*Shade : Dark Blue*



*Appearance*

## **TGR20-X**

---

*Highlight* : **Green Turquoise**

*Shade* : **Light Blue**



*Appearance*

## **GR20-X**

---

*Highlight* : **Light Green**

*Shade* : **Light Blue**



*Appearance*

## **GD20-X**

---

*Highlight* : **Gold**

*Shade* : **Green**



Gradation

**GD20-X**



30

40

50

60

70

80

90

100

*Appearance*

**OR20-X**

*Highlight* : Orange

*Shade* : Light Green



*Appearance*

**CPK20-X**

*Highlight* : Pale Pink

*Shade* : Gold



*Appearance*

**RE20-X**

*Highlight* : Red Gold

*Shade* : Dark Violet



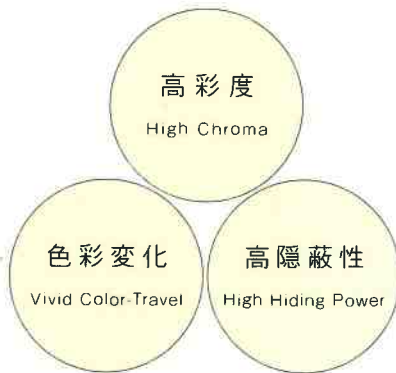
product features

# 着色材を使わず、 光の干渉で色彩を帯びるメタリック顔料

Colorant-free metallic effect pigment that brings out colors by light interference

【 3つの特長 】

Three Main Features

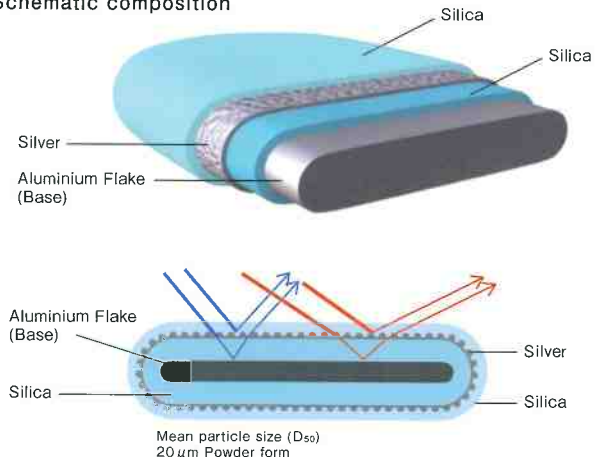


- 銀めっき面とアルミ表面の反射光の光路差により多色性を示します。  
The difference of the optical path provides color travel.
- 表面が金属のため、反射光が多く、強い干渉色が得られます。  
High reflectance of the interference layer provides the strong interference color.
- 光を透過させないため、隠蔽性に優れます。  
The opaque substance provides the high hiding power.

CHROMASHINE®は着色材を一切使わず、「光の干渉」で色彩を帯びます。「光の干渉」は、シャボン玉や孔雀の羽、蝶の羽などを身近に存在していますが、CHROMASHINE®は東洋アルミの独自技術によって創り出されています。

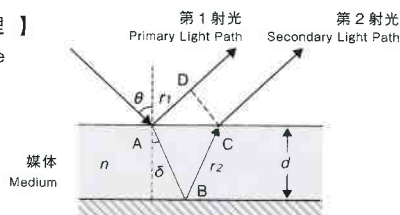
CHROMASHINE® pigments do not use organic colorants and yet brings out beautiful colors by "light interference." Light Interference effect, which may be seen around us on soap bubbles, peacock feathers, and butterfly wings, is applied on CHROMASHINE® pigments by Toyo Aluminium's unique technologies.

Schematic composition



【 干渉の原理 】

Light interference mechanism



皮膜表面で反射する光(第1反射光)と媒体を通過して反射する(第2反射光)が光路差による位相差を生じ、特定波長の光が強調される。

Primary Light Path may be reflected at surface while Secondary Light Path may reflect after penetrating it. This creates phase difference by light path variations and thereby stressing the lights of certain wave lengths.

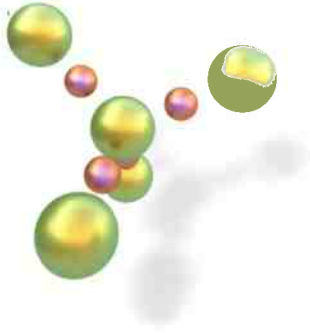
$$dn \cos \delta = (2m+1)\lambda/4 \quad (m=0,1,2..m)$$

スイスに本部を置くエコテックス国際共同体が定める「ECO PASSPORT(エコパスポート)\*」認証取得。2018.1.29現在  
BL20-X, GR20-X, GD20-X, OR20-X, RPK20-X, CPK20-X, MBL20-X, TGR20-X, RE20-X(全9色)

\*ECO PASSPORT: 繊維製品の生産時に使用される染料/顔料・助剤・仕上加工剤を対象とした、化学物質に対する安心・安全の認証

The following CHROMASHINE® pigments have been granted "ECO PASSPORT" certification by OEKO-TEX® of Switzerland. (As of Jan. 29 2018)  
BL20-X, GR20-X, GD20-X, OR20-X, RPK20-X, CPK20-X, MBL20-X, TGR20-X, RE20-X

ECO PASSPORT by OEKO-TEX® is a mechanism by which textile chemical suppliers demonstrate through assigned screening and analytical stages and passing them that their products can be used in sustainable textile products.



## 東洋アルミニウム株式会社

---

### パウダー・ペースト事業本部

<http://www.toyal.co.jp/>

#### 大阪オフィス

〒541-0056 大阪府大阪市中央区久太郎町三丁目6番8号 御堂筋ダイワビル  
TEL:06-6271-3154 FAX:06-6243-0664

#### 東京オフィス

〒140-0002 東京都品川区東品川二丁目2番20号 天王洲郵船ビル  
TEL:03-5461-0708 FAX:03-5461-0723

## Toyal Aluminium K.K.

---

### Powder & Paste Headquarters

<http://www.toyalgroup.net/>

#### OSAKA OFFICE

3-6-8 Kyutaromachi, 13-14F Midosuji Daiwa Bldg., Chuo-ku,  
Osaka 541-0056, Japan

#### TOKYO OFFICE

2-2-20 Higashi-Shinagawa, 6F Tennozu Yusen Bldg., Shinagawa-ku,  
Tokyo 140-0002, Japan

### Global coverage by the following Toyal Group companies:

#### TOYAL EUROPE S.A.S.U.

Usine du Pont-du-Roy, Route de Lescun, 64490 Accous, France  
+33 5 59 983 535

#### TOYAL AMERICA, INC.

17401 South Broadway, Lockport, Illinois 60441, USA  
+1 815 740 3037

#### TOYAL ZHAOQING CO., LTD.

No.1, Xinglong 5 Street, Linjiang Industrial Park, Zhaoqing National High-Tech  
Industrial Development Zone, Guangdong 526238, China  
+86 758 3602 080

#### TOYAL MMP INDIA PVT. LTD.

K-61, 5 Star Zone, MIDC, Butibori, Nagpur 441122, India  
+91 7103 267890

#### TOYAL (THAILAND) CO., LTD.

1, Empire Tower Bldg. Tower 2, 15th Floor Unit 1505,  
South Sathorn Rd., Yannawa Sathorn, Bangkok 10120, Thailand  
+66 2287 3050