虽然劲乘认为本手册提供的信息是可靠的，但不承诺和保证信息的准确，完整和可靠性。由于产品的是使用条件超出我们的控制范围，所以我们对这里提出的一切建议与意见不作保证。亦不默示保证这里描述的产品的试销性或适用性。劲乘在任何时候都不会对因使用此处的信息或依赖此处的信息行事而产生的任何性质的损害承担责任。劲乘明确声明，使用此处提及的材料，不论是单独使用还是与其他材料一起使用，均不接受任何第三方的合法索赔，包括侵权索赔。使用者应遵守一切相关法律及专利规定。

This information and our technical advice – whether verbal, in writing or by way of trial – are given in good faith but without any warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided – especially that contained our safety data and technical information sheets – and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility.

FulColor®
劲　　乘

www.fulcolor.net




湖北劲乘新材料有限公司
地址：湖北省黄冈市黄梅县小池镇临港北路2888号


上海劲乘新材料有限公司
Add: 上海市闵行区银都路588号5007室
Tel: 021-54388960

国际业务 | Hunter Liu
电话/Tel：+86-13701863120
Email：lhwln2002@163.com

上海 | Shanghai
刘经理： 13701863120

广东 | Guangdong
彭经理： 18117433912

四川 | Sichuan
胡经理： 18117484959

江苏 | Jiangsu
邱经理： 18521056882

浙江 | Zhejiang
吴经理： 18521056893

天津 | Tianjin
刘经理： 13162011725




# 涂料用效果颜料及无机陶瓷颜料

## Metallic Effect Pigments and Inorganic Pigments MMO for Coatings

# NB免邦定银粉
## NB Aluminum Powder

NB的英文为Never Bonding，永不邦定的意思。NB免邦定金属效果颜料是上海劲乘新材料有限公司独立开发的树脂包覆型产品，主要原理：将铝片表面包覆一层二氧化硅后，再包覆一层很厚的树脂。经过最外层树脂包覆后，免绑定铝粉的带电性和底粉的带电性接近，因而不会聚枪，可以达到免绑定的目的。由于颜料最外层包覆了很厚的树脂，当粉末涂料成膜时，外层的树脂可以很好的成膜于颜料表面，这和油漆罩清漆非常类似，从而达到仿油漆的效果。同时可以帮助客户省去邦定工艺，降低金属色粉末涂料生产成本，提高金属粉末涂料耐化学性、耐候性、耐指纹性并且增加附着力。可以让金属颜料添加量大大提高。由于其非危险品的特性，彻底颠覆了人们对金属颜料粉的易燃易爆属性的认知。

NEVER BONDING! NB powder, Fulcolor's cutting-edge technology in the product portfolio, is a new product line of metallic effect pigment for powder coating industry. The aluminum flake was coated with silicon and subsequently coated with resin. With resin encapsulation, the aluminum powder can be charged as base powder without spitting problem during spray. The resin layer will be cured as film outside the aluminum flake resembling clear top coat. The resin layer also increases the chemical resistance, weather fastness, fingerprint resistance and adhesion. NB metallic effect pigment can help customer to skip bonding process and it can be used for high dosage in the formulation. NB metallic effect pigment is considered as Non-DG product and is more environmentally friendly and safe for handling.

| 编号 Code | 粒径 D50 um | 片状 Flake | 备注 Remarks |
|---|---|---|---|
| NB1006PSI | 10 | SD | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |
| NB2006PSI | 20 | SD | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |
| NB3506PSI | 35 | SD | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |
| NB5006PSI | 50 | SD | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |

SD: Silver dollar 银元型

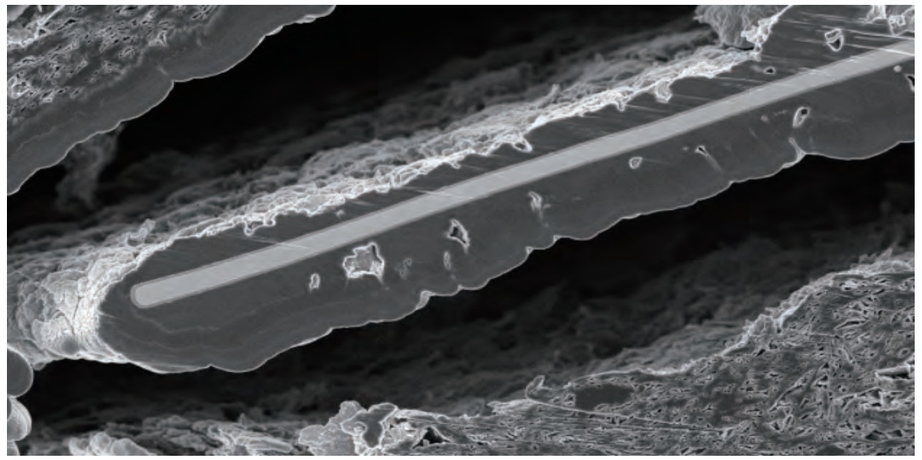


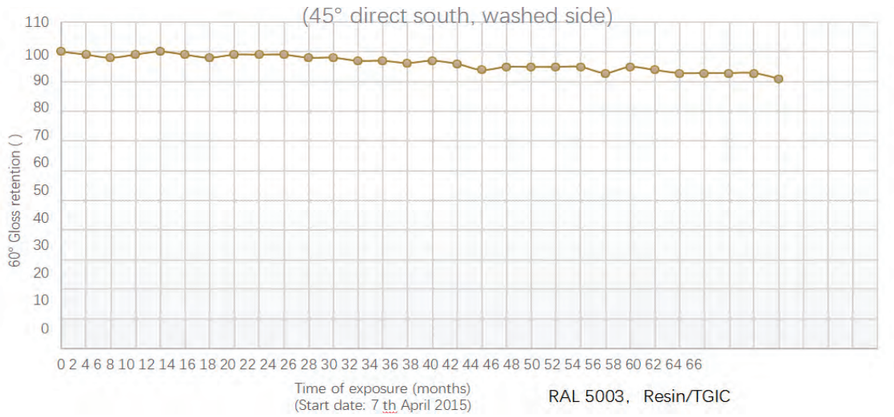
# NBU超耐候银粉
## Super Durability Aluminum Powder

超耐候银粉采用户外专用超耐侯树脂进行包覆处理，此树脂经过弗罗里达5年曝晒验证，耐候性能优异。NB超耐侯铝粉包覆层更加致密，耐酸碱性更加优异，可用于户外超耐候氟碳粉末涂料，添加量高，不堵枪，不吐粉。

NB weather resistance aluminum powder is coated with silicon and super weather fastness resin. It exhibits excellent chemical resistance and weather fastness. It can be used for high pigment loading without spitting problem and is recommended for outdoor PVDF powder coating.

| 编号 Code | 粒径 D50 um | 备注 Remarks |
|---|---|---|
| NBU2008WR | 20 | 超耐候免邦定铝粉 Excellent weather fastness |
| NBU3508WR | 35 | 超耐候免邦定铝粉 Excellent weather fastness |
| NBU5008WR | 50 | 超耐候免邦定铝粉 Excellent weather fastness |






Florida exposure test data for the resin
包覆树脂弗罗里达曝晒数据

# NB高白亮银粉

## NB Aluminum Powder with Excellent Whiteness and Metallic Effect

NB高白亮银粉是上海劲乘新材料有限公司独立开发的树脂包覆型产品，通过工艺控制铝片表面二氧化硅包覆层的厚度，再经过最外层树脂包覆后，使得铝粉的带电性和底粉的带电性接近，更容易上粉喷涂，不容易堵枪。包覆工艺提高了金属粉末涂料耐化学性、耐候性、耐指纹性并且增加附着力，可以让金属颜料添加量大大提高，喷涂后铝粉白亮度更好，金属效果更佳。经过包覆的铝银粉为非危险品，更加方便运输和使用，彻底颠覆了人们对金属颜料粉的易燃易爆属性的认知。

NB aluminum powder produced by Fulcolor's cutting-edge technology is a new metallic effect pigment for powder coating industry. The aluminum flake was coated with silicon and subsequently coated with resin. With resin encapsulation, the aluminum powder can be charged as base powder without spitting problem during spray. The resin layer will be cured as film outside the aluminum flake resembling clear top coat. The resin layer also increases the chemical resistance, weather fastness, fingerprint resistance and adhesion. NB metallic effect pigment is considered as Non-DG product and is more environmentally friendly and safe for handling.

| 编号 Code | 粒径 D50 um | 片状 Flake | 备注 Remarks |
|---|---|---|---|
| NB0505PSI | 5 | Silver dollar | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |
| NB0605PSI | 6 | Silver dollar | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |
| NB1405PSI | 14 | Silver dollar | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |
| NB2005PSI | 20 | Silver dollar | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |
| NB3505PSI | 35 | Silver dollar | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |
| NB5505PSI | 55 | Silver dollar | 优异的耐化学性及耐候性 Excellent chemical and weather fastness |
| NB9905PSI | 99 | Diamond | 粒径分布集中，超级闪烁 Narrow distribution, super sparkling |

SD: Silver dollar 银元型



# 溶剂型铝浆

## Solvent Based Aluminum Paste

上海劲乘生产的非浮型铝浆，铝片为抛光银元型，铝片形状更规则，平整度更佳，粒径分布集中，金属质感好，白亮度高，遮盖力更强。可广泛用于塑胶漆，工业漆等各种涂料。

Shanghai Fulcolor Advanced Material produces non-leafing polished silver dollar aluminum paste. The aluminum paste has narrow particle size distribution and exhibits excellent whiteness, metallic effect and hiding powder. It can be used in plastic coating, industrial coating etc.

| 编号 Code | 粒径 D50 um | 备注 Remarks |
|---|---|---|
| AL0606 | 06 | 超细铝浆，白亮度好，遮盖力高<br>Very fine particle size with excellent metallic effect, whiteness and hiding power |
| AL1106 | 11 | 超细铝浆，白亮度好，遮盖力高<br>Very fine particle size with excellent metallic effect, whiteness and hiding power |
| AL1406 | 14 | 细粒径铝浆，白亮度好，遮盖力高<br>Fine particle size with excellent metallic effect, whiteness and hiding power |
| AL1606 | 16 | 细粒径铝浆，白亮度好，遮盖力高<br>Fine particle size with excellent metallic effect, whiteness and hiding power |
| AL2006 | 20 | 白亮度好，遮盖力高<br>Excellent metallic effect, whiteness and hiding power |
| AL3006 | 30 | 闪烁度好，金属感强<br>Excellent sparkling and metallic effect. |
| AL4506 | 45 | 闪烁度好，金属感强<br>Excellent sparkling and metallic effect. |
| AL9006 | 90 | 超级闪烁，金属感强<br>Super sparkling and excellent metallic effect. |

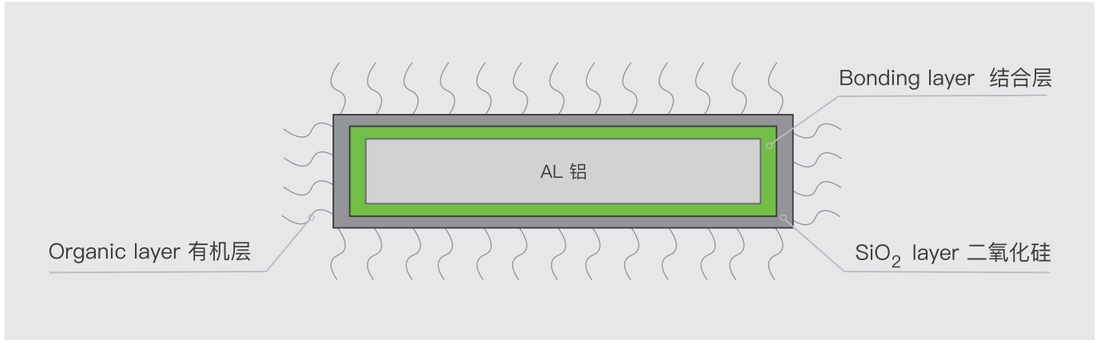


# 水油通用铝浆

## Aluminum Paste for Water & Solvent Based System

随着人们对环保要求的提高，劲乘新材料不断创新，推出了全新的水性铝银浆产品。劲乘的水性铝浆采用了全球领先的结合层包覆技术，打破了传统硅包覆概念，让二氧化硅包覆层更致密、更牢固。铝片和水被完全阻隔开，这使得本系列产品拥有卓越的发气稳定性。另外创新的有机层使该系列产品拥有优异的分散性和储存稳定性，适用于所有水性体系以及有高耐化学性要求的体系，例如涂料，油墨，UV体系。

With increasing environmental protection demands, product innovations for environmental sustainability are always high priority for FulColor. Now we have developed new generation water-based aluminum paste with bonding layer instead of traditional SiO2 layer which holds the SiO2 layer tightly to separate aluminum flake from water completely. With this technology, FulColor water-based aluminum paste exhibits excellent chemical resistance, dispersing and storage stability for water-based paint, ink and UV systems.




### 产品特点

环保，低VOC
分散好
稳定性好，无发气问题
耐化学性好
高白亮，高金属感

### The Advantages:

Environmental friendly, low VOC
Good dispersion
Stable in water-based system without gas issue
Excellent chemical resistance
Excellent brightness, whiteness and metallic effect

| 编号 Code | 粒径 D50 um | 固含量 Solid Content (%) | 载体 Carrier | 片状 Flake Type | 水性 WB | 油性 SB | UV |
|---|---|---|---|---|---|---|---|
| AL0602SI | 6 | 68 | PM | PS | ● | ● | ○ |
| AL1002SI | 10 | 68 | PM | PS | ● | ● | ○ |
| AL1402SI | 14 | 68 | PM | PS | ● | ● | ○ |
| AL2002SI | 20 | 68 | PM | PS | ● | ● | ○ |
| AL3502SI | 35 | 68 | PM | SD | ● | ● | ○ |

PM: Propylene Glycol Monomethyl Ether 丙二醇甲醚
PS: Polished Silver Dollar 抛光银元型
SD: Silver Dollar 银元型

WB: Water-based 水性体系
SB: Solvent based 油性体系
● : Recommended 推荐使用
○ : Limited Suitability 经测试后使用



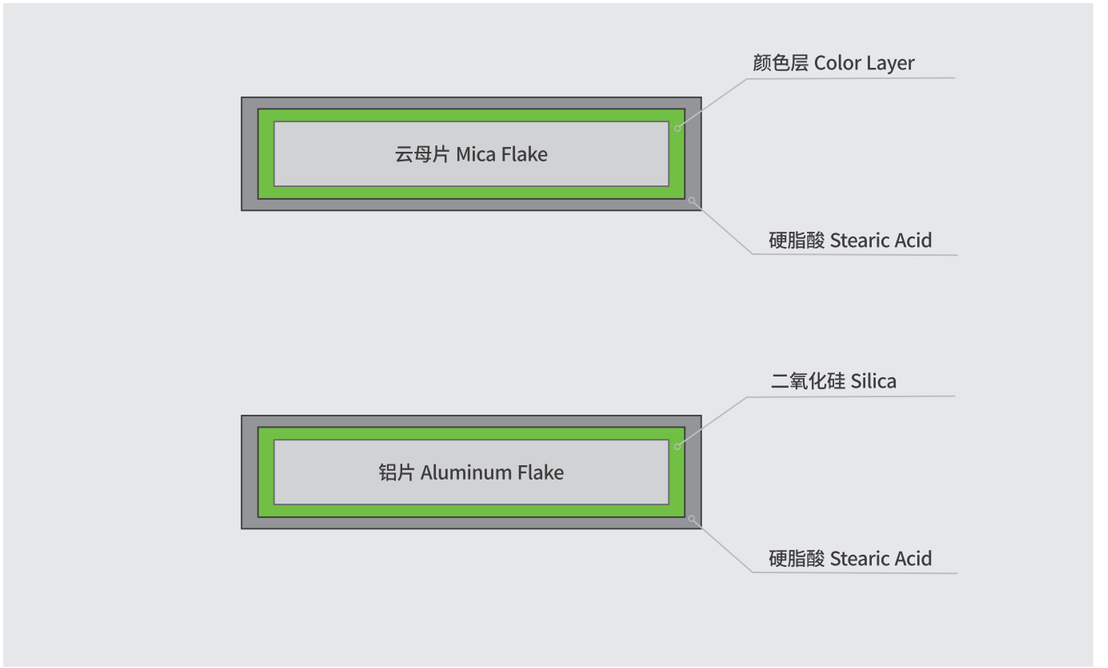
# 浮型金属效果颜料

## Leafing Metallic Effect Pigment

浮型金属效果颜料外部采用硬脂酸包覆，更易上粉，不易堵枪。包覆工艺提高了粉末涂料的耐候性、耐酸碱性，并且流平更好、遮盖力更强、金属感更高。该产品可邦定，可干混使用。

Leafing metallic effect pigments are externally coated with stearic acid. It can be easily used in powder coating without spitting problem. The coating process improves the weather fastness, chemical resistance, levelling and metallic gloss. The product can be used in bonding process or dry blend.

| 编号 Code | 粒径 D50 um | 颜色 Colour | 备注 Remarks |
|---|---|---|---|
| NB8063-3F | 6 | 细银粉Fine Aluminum power | 降低了二氧化硅包覆含量 Less silica coated |
| NB8143-3F | 14 | 细银粉Fine Aluminum power | 降低了二氧化硅包覆含量 Less silica coated |
| NB8111F | ＜15 | 缎银Rutile silver fine satin | 细腻丝滑，流平好 Fine and silky, excellent levelling |
| NB8104F | 10-40 | 丝绸珍珠Rutile silk | 白亮，流平好 Excellent metallic effect, excellent levelling |
| NB8123F | 5-25 | 光辉缎Glary satin | 白亮，流平好 Excellent metallic effect, excellent levelling |
| NB8302F | 5-25 | 缎金Gold satin | 淡金 Pale gold |
| NB8520F | 5-25 | 红铜缎Red copper satin | 红铜色 Copper |
| NB8522F | 5-25 | 红棕缎Red brown satin | 黄相红 Orange shade red |
| NB8524F | 5-25 | 酒红缎Red wine satin | 最蓝相红，流平好 Blue shade red, excellent levelling |
| NB8442F | 5-25 | 红色珠光Bright red | 正红，略粗 Royal red, larger D50 |



# NB免邦定珠光粉

## NB Pearlescent Pigment

NB的英文为Never Bonding, 永不邦定的意思。NB免邦定珠光粉是上海劲乘新材料有限公司独立开发的树脂包覆型产品，使NB珠光颜料可以直接使用干混工艺，从而避免了邦定工艺破坏片状珠光颜料，保证了绚丽多彩的珠光效果。同时使珠光颜料得到很强带电能力，提高上粉率和遮盖力，可以提高颜料添加量，轻松做到10%以上的珠光含量且不堵枪。NB珠光粉的带电性和底粉相当，大大提高了回收性能。

NEVER BONDING! Fulcolor's cutting-edge technology in the product portfolio, is a new product line of pearlescent pigments developed particularly for powder coating industry.

These resin encapsulated pearls can be easily used by dry blending which greatly keep the mica flake from being destructed by the bonding process, so the original chrome can be very well maintained, and it's easily charged to improve coating ratio and hiding power, without spitting problem, the pigment loading can be 10% or above!

| 编号 Code | 粒径 D50 um | 备注 Remarks |
|---|---|---|
| PMW01503NB | 15 | 白色 White |
| PMW02002NB | 20 | 白色 White |
| PMW04101NB | 41 | 白色 White |
| PGW04001NB | 40 | 白色玻璃珠光 Glass based white |
| PMJ01502NB | 15 | 金色 Fine Gold |
| PMJ02039NB | 20 | 金色 Gold |
| PMJ04009NB | 40 | 金色 Gold |
| PMJ02103NB | 21 | 红金 Pale Gold |
| PMJ02037NB | 20 | 青金 Rich Gold |
| PMC02250NB | 22 | 古铜色 Copper |
| PMC04522NB | 45 | 古铜色 Copper |
| PMC02032NB | 20 | 红铜色 Copper red |
| PMR01518NB | 15 | 红色 Red |
| PMR01519NB | 15 | 超级艳红 Bright red |
| PMR02203NB | 22 | 黄相艳红 Bright orange shade red |
| PMG02238NB | 22 | 绿色 Green |
| PML02205NB | 22 | 红相蓝色 Bright red shade blue |
| PML02205B/NB | 22 | 绿相蓝色 Bright green shade blue |
| PMS02581NB | 25 | 金属银色 Silver |
| PMS05591NB | 55 | 金属银色 Silver |





# 青金珠光粉

## Rich Gold Pearlescent Pigment

PMA303青金珠光是用特殊的包覆工艺将人工合成的云母制成特有的青金色效果颜料，其金属质感不亚于类似的硅包覆青金铜粉。其在耐温、耐候、耐化学性等方面远远优于铜金粉。是户外级别的优异产品。可以广泛的被应用于塑料、油漆、粉末涂料、油墨、皮革等领域。

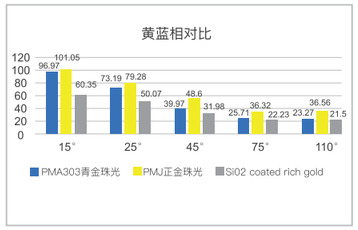
- PMA303青金珠光遮盖力极佳，和硅包覆的铜金粉接近
- PMA303青金珠光黝黑带青的效果和硅包覆青金粉非常接近
- PMA303青金珠光可以和银粉搭配，调到更加接近青金铜粉效果

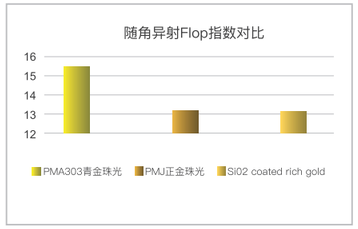
PMA303 is specially coated synthetic mica for rich gold pearlescent pigment. It exhibits excellent metallic effect like bronze powder. Meanwhile, PMA303 exhibits better heat stability, weather fastness and chemical resistance compared with bronze powder. PMA303 can be used in plastics, liquid paint, powder coatings, printing inks etc.

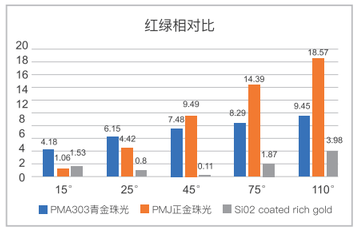
PMA303 has excellent hiding power which is similar to silicon coated bronze powder.

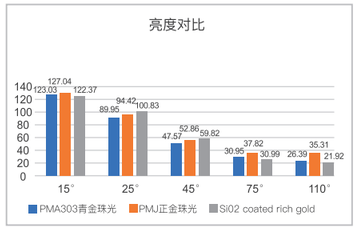
PMA303 has black undertone similar to bronze powder.

PMA303 can be mixed with silver powder to reach same shade as broze powder.

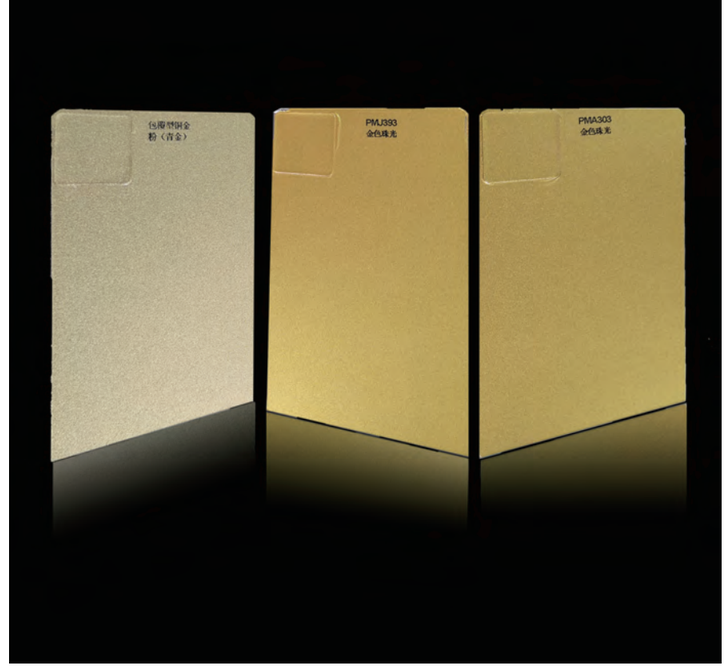



| 编号 Code | 粒径 D50(um) | 随角异色 Flop |
|---|---|---|
| PMA303青金珠光/Rich Gold | 20 | 15.52 |
| PMJ 393正金珠光/Royal Gold | 20 | 13.37 |
| 包覆型青金SiO2 Coated Bronze Powder | 25 | 13.30 |



# 金属银珠光粉

## Metallic Silver Pearlescent Pigment

金属银珠光是用特殊工艺包覆人工合成云母特制而成。并且再次对珠光进行树脂包覆处理，使其具有优异的带电性能，可以直接使用干混工艺，大大提高颜料添加量，从而避免了邦定工艺破坏片状珠光颜料，达到优异的金属效果。 银白珠具有优异的那酸碱性和耐候性。

Metallic Silver Pearlescent Pigment is specially coated synthetic mica to exhibit high chroma and gloss red color. It is also coated with resin which can be easily charged for powder coating. It can be used in dry blend avoiding damages caused by bonding process.

| 编号 Code | 粒径 D50 um | 备注 Remarks |
|---|---|---|
| PMS02581NB | 25 | 金属银白色，上粉高，流平好 Metallic white, good leveling |
| PMS05591NB | 55 | 金属银白色，上粉高，流平好 Metallic white, good leveling |





# 超艳红珠光粉

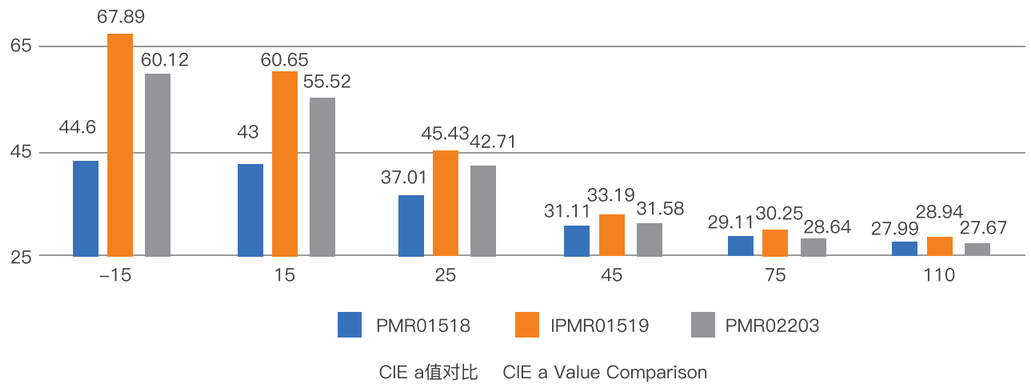
## Super Brilliant Red Pearlescent Pigment

超艳红珠光是用特殊工艺包覆人工合成云母特制而成。并且再次对珠光进行树脂包覆处理，使其具有优异的带电性能，可以直接使用干混工艺，从而避免了邦定工艺破坏片状珠光颜料，保证了绚丽多彩的珠光效果。 劲乘超艳红珠光带电性好，可以提高上粉率和遮盖力，轻松做到10%以上的珠光含量且不堵枪。

Super brilliant red pearlescent pigment is specially coated synthetic mica to exhibit high chroma and gloss red color. It is also coated with resin which can be easily charged for powder coating. It can be used in dry blend avoiding damages caused by bonding process. Super brilliant red pearlescent pigment can be used for high pigment loading for 10% or above.

| 编号 Code | 粒径 D50(um) | 备注 Remarks |
|---|---|---|
| PMR01519NB | 15 | 绚丽蓝相色 Brilliant Blue Shade Red |
| PMR02203NB | 22 | 绚丽橙相红 Brilliant Orange Shade Red |






CIE a值对比　CIE a Value Comparison

# 珠光粉系列
## Pearlescent Pigment

| 类别 Type | 型号 Code | 粒径(um) Particle Size | 备注 Remarks |
|---|---|---|---|
| 银白系列 Silver White | PMW103 | 10–60μm | 银色珍珠 Rutile Sterling Silver |
| | PMW104 | 10–40μm | 丝绸珍珠 Rutile Silk |
| | PMW111 | <15μm | 缎银 Rutile silver Fine Satin |
| | PMW123 | 5–25μm | 光辉缎 Glary Satin |
| | PMW151 | 10–100μm | 光泽珍珠 Luster Pearl |
| 虹彩系列 Interference | PMJ205 | 10–60μm | 珍珠金色 Interference Gold |
| | PMR215 | 10–60μm | 珍珠红色 Interference Red |
| | PMP219 | 10–60μm | 珍珠紫红 Interference Purple |
| | PML225 | 10–60μm | 珍珠蓝色 Interference Blue |
| | PMG235 | 10–60μm | 珍珠绿色 Interference Green |
| | PML289 | 10–100μm | 闪蓝 Interference Glitter Blue |
| 蓝色染色系列 Blue | PML315B | 10–60μm | 极光蓝 绿相 Luster Green Blue |
| | PML315 | 10–60μm | 极光蓝 红相 Lust Blue |
| 金色系列 Gold | PMJ300 | 10–60μm | 珍珠金色 Gold |
| | PMJ302 | 5–25μm | 缎金 Gold Satin |
| | PMJ303 | 10–60μm | 皇室金色 Royal Gold |
| | PMJ306 | 10–60μm | 奥林匹克金 Olympic Gold |
| | PMJ307 | 10–60μm | 深邃金色 Abstruse Gold |
| | PMJ351 | 10–100μm | 闪光金色 Shimmer Gold |
| 云母铁系列 Bronze | PMC500 | 10–60μm | 青铜 Bronze |
| | PMC502 | 10–60μm | 棕红 Red Brown |
| | PMR504 | 10–60μm | 葡萄酒红 Wine Red |
| | PMC520 | 5–25μm | 青铜缎 Bronze Satin |
| | PMR522 | 5–25μm | 红棕缎 Red Brown Satin |
| | PMR524 | 5–25μm | 酒红缎 Red Wine Satin |
| | PMR442 | 5–25μm | 红色珠光 Bright Red |
| 人工合成水晶珠光 Synthetic Mica | PMW7002 | 10–60μm | 中闪珠光白 Super Silver |
| | PMW7003 | 5–25μm | 超细白亮 Super Luster Satin |
| | PMW7005 | 2–15μm | 细白银 Super Silver Satin |
| | PMW7400 | 20–80μm | 超白中闪银 Super Luster White |
| | PMW7300 | 30–150μm | 超白闪银 Super Shiny White |
| | PMW7000 | 50–300μm | 超白闪银 Super Sparkle White |
| | PMR8342 | 10–60μm | 超艳耐候级橙红珠光 High Chroma Orange Red |



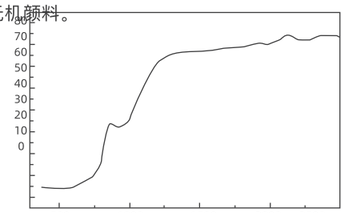
| 类别 Type | 型号 Code | 粒径(um) Particle Size | 备注 Remarks |
|---|---|---|---|
| 人工合成水晶珠光 Synthetic Mica | PMR8442 | 10–60μm | 超艳耐候级正红珠光 High Chroma Red |
| | PMC302 | 10–60μm | 红铜色 Red Copper |
| | PMC322 | 10–60μm | 棕红色 Red Brown |
| | PMC222 | 25–100μm | 古铜色 Copper |
| | PMJ493K | 10–30μm | 正金色 Gold |
| | PMJ193 | 50–250μm | 正金色 Sparkle Gold |
| | PMJ293 | 10–58μm | 正金色 Royal Gold |
| | PMJ393 | 10–59μm | 正金色 Royal Gold |
| | PMJ393R | 10–60μm | 略偏红相金色 Red Gold |
| | PMJ493 | 5–25μm | 正金色 Royal Gold Stain |
| | PMJ593 | <15μm | 正金色 Royal Gold Fine Stain |
| | PMA303 | 10–60μm | 青金 Rich Gold |
| 银色珠光 Silver Gray | PMS551 | 55μm | 银灰色 Silver Gray |
| | PMS251 | 25μm | 银灰色 Silver Gray |
| 玻璃珠光 Glass Based Pearl | PGW001 | 50–200μm | 白色 Glitter White |
| | PGW002 | 160–600μm | 白色 Shiny White |
| | PGW8201 | 20–100μm | 白色 Shimmer White |
| | PGW801 | 100–500μm | 白色 Sparkle White |
| | PGW901 | 100–700μm | 白色 Sparkle White |
| 变色龙 Chameleon | FC05YGL | 10–60μm | 黄/绿/蓝 Yellow/Green/Blue |
| | FC06ROY | 10–60μm | 红/橙/黄 Red/Orange/Yellow |
| | FC07PRG | 10–60μm | 紫红/红/绿 Plum/Red/Green |
| | FC08PRY | 10–60μm | 紫/红/黄 Purple/Red/Yellow |
| | FC09LPR | 10–60μm | 蓝/紫/红 Blue/Purple/Red |
| | FC10LGP | 10–60μm | 蓝绿/蓝/紫红 Teal/Green/Plum |
| | FC11GLR | 10–60μm | 绿/蓝/红 Green/Blue/Red |
| | FC12POG | 10–60μm | 紫红/橙/绿 Plum/Orange/Green |
| | FC22YGL | 10–60μm | 黄/绿/蓝 Yellow/Green/Blue |
| | FC23ROY | 10–60μm | 红/橙/黄 Red/Orange/Yellow |
| | FC24PRO | 10–60μm | 紫红/红/橙 Plum/Red/Orange |
| | FC25LPO | 10–60μm | 蓝/紫/橙 Blue/Purple/Orange |
| | FC26GLP | 10–60μm | 蓝绿/蓝/紫红 Teal/Blue/Plum |
| | FC27GRO | 10–60μm | 绿/红/橙 Green/Red/Orange |

# 耐高温陶瓷颜料

## CICP/MMO

耐高温陶瓷颜料是由两种以上金属氧化物经高温煅烧固相反应而生成的彩色混相晶体，主要金属包括钴，鉻，铁等过度金属元素。学术上也称之为煅烧颜料或者金属氧化物混相颜料MMO。CICP具有非常稳定的金红石型和尖晶石型晶体结构，这赋予其突出的性能，极强的耐热性、耐候以及耐化学性。CICP被广泛的用于塑料，涂料和陶瓷等领域的着色。具有环保无毒的耐高温无机颜料。

CICP is crystallized color compound in solid solution produced by the calcination of two or more kinds of metal oxides including, Co, Cr, Fe or such transition metal element(s) at a very high temperature. It is also called calcined pigment or mixed metal oxides (MMO). CICP has a stable crystalline structure of rutile or spinel which provides outstanding properties, particularly heat resistance, weatherability and chemical resistance. CICP is widely used as colorants for ceran[illegible]aints.



铁铬黑（P.Br.29）红外反射图

| 颜色 Color | C.I. | 编号 Code | 耐温(℃) Heat Stability | 红外反射率(%) TSR | 备注 Remarks |
|---|---|---|---|---|---|
| | P.G.50 | PIG5006 | 1000 | 32.31 | 蓝相钴绿<br>Blue shade cobalt green |
| | P.G.17 | PIG1709 | 500 | 44.27* | 氧化铬绿，符合ROHS<br>Chrome oxide green, ROHS compliance |
| | P.B.28 | PIL2801 | 1200 | 45.06 | 红相钴蓝<br>Red shade cobalt blue |
| | P.B.36 | PIL3602 | 1200 | 39.08* | 绿相钴蓝<br>Green shade cobalt blue |
| | P.Bk26 | PIB2611 | 800 | 7.70 | 锰铁黑<br>Manganese Ferrite Black |
| | P.Bk.28 | PIB2864 | 750 | 4.50 | 标准铜铬黑<br>Copper chromite black |
| | P.Bk.28 | PIB2865 | 750 | 3.84 | 超强着色力的铜铬黑<br>High color strength copper chromite black |
| | P.Bk.28 | PIB2829 | 750 | 3.14 | 高纯度铜铬黑<br>High purity copper chromite black |
| | P.Bk.28 | PIB2868 | 750 | 3.98 | 经济型铜铬黑<br>Economically copper chromite black |
| | P.Bk.33 | PIB3305 | 600 | 7.3* | 锰铁黑<br>Iron Manganese Black |
| | P.Y.53 | PIY5300 | 1000 | 73.40 | 绿相钛黄<br>Green shade titanium yellow |
| | P.Br.24 | PIY2498 | 1000 | 60.90 | 最红相钛黄<br>Very red shade titanium yellow |
| | P.Br.24 | PIY2466 | 1000 | 63.22 | 高着色力钛黄<br>High color strength titanium yellow |
| | P.Br.29 | PIB2911 | 1000 | 23.50 | 高红外反射<br>IR pigment |
| | P.Br.33 | PIR3308 | 1000 | 34.30 | 锌铁铬棕<br>Zinc iron chromite brown |
| | P.Y.119 | PIY11912 | 350 | 41.9* | 锌铁黄<br>Zinc iron oxide |
| | P.Y.184 | PIY18401 | 260 | 81.1* | 绿相钒酸铋黄，应用于涂料，塑料等<br>Lemon shade bismuth vanadate |
| | – | PIV1001 | 400 | – | 钴紫，耐温好<br>Cobalt violet with good heat stability |
| | – | PIR9011 | 320 | 61.5* | 硫化铈红<br>Cerium monosulfide |
| | – | PIR9012 | 320 | 56.8* | 硫化铈红<br>Cerium monosulfide |
| | – | PIO9013 | 320 | 67.9* | 硫化铈橙<br>Cerium monosulfide |

*400~1400nm测试



# 环保复合颜料

## Hybrid Pigment

环保复合颜料符合各项环保要求，安全无毒，颜色鲜艳，着色力高，具有优异耐温性和耐候性，是取代铅镉颜料的最佳选择。

Hybrid pigment is environmental friendly product with excellent heat stability and weather fastness. It exhibits bright colors and high tinting strength which is best choice to replace chrome pigments.



| 颜色 Color | 编号 Code | 耐温(℃) Heat Stability | 耐候性 Weather Fastness | 备注 Remarks |
|---|---|---|---|---|
| | PIY1847 | 290 | 5 | 柠檬黄，接近铋黄184<br>Lemon shade, similar to Py184 |
| | PIY1020 | 250 | 5 | 中黄，替代中铬黄<br>Middle shade yellow |
| | PIY1021 | 250 | 4 | 中黄，经济型<br>Economical middle shade yellow |
| | PIY2070 | 250 | 5 | 推荐用于取代中铬黄<br>Replace medium chrome yellow |