

Metalloy[®]
ALUMINIUM PIGMENTS

**high quality metallic pigments and dispersions
for cosmetics**



Metalloy® aluminium pigments for cosmetics

Metalloy® effect pigments are aluminium based pigments offering metallic effects. In cosmetics Metalloy® pigments provide new styling potential with mesmerizing covering polychromatic effects.

The Metalloy® product range can be divided into two product lines:

- Silica and metal oxide coated aluminium powders
- High chrome effect VMP aluminium paste

Silica and metal oxide coated aluminium powders:

The silica and metal oxide coated aluminium powders are innovative aluminium pigments especially developed for application in colour cosmetics. The metal oxide coated range contains metallic shades in silver, gold, blue, green, orange and copper. They can be combined with other effect pigments and colorants such as pearlescent and organic pigments. This enables formulators to create unique colours and effects.

High chrome effect VMP aluminium paste:

A Vacuum Metallized Pigment (VMP) dispersed in Ethyl Acetate. Metalloy® VMP010-EA provides superior brilliance in decorative finishes such as nail polishes. It offers a high gloss, mirror like reflection.

Product benefits

- Covering special effect pigments
- Intense high gloss metallic reflection
- Endless colour play in combination with other special effect pigments
- Available in 1kg packaging

Applications

We recommend to use this product line for the following applications:



Lip area



Eye area



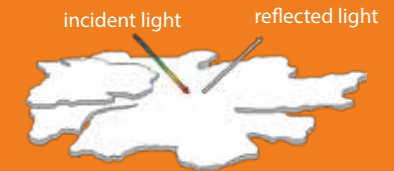
Nail



External

The effect

The metallic effect of Metalloy® pigments is based on the reflection of light on the surface of the pigment. Next to a direct reflection also light scattering occurs because of the surface roughness and existing edges. The observed final effect is the total of this scattering and reflection.



Atomized aluminium powder is used in a wet milling process to produce flat, cornflake like particles which are the base for the Metalloy® pigments. The flakes are subsequently coated on all sides with a thin layer of Silica, Red Iron Oxide and/or Ferric Ferrocyanide, resulting in the current colour range.



Metalloy® aluminium pigments

The silica treated Metalloy® range exists out of aluminium pigments coated with metal oxides. The product range is ideally suited for colour cosmetics such as nail polish, lipsticks and pressed powders. These Metalloy® pigments offer outstanding metallic colours in different shades. Metalloy® pigments can be combined with other effect pigments and colorants such as pearlescents and organic pigments.

Art. nr.	Product name	Particle size	Effect
1804510	Metalloy Bright Shining Silver	50 - 80 micron	Bright metallic silver
1804520	Metalloy Sparkling Shining Silver	50 - 150 micron	Sparkling metallic silver
1804550	Metalloy Red Gold	30 - 60 micron	Metallic gold lustre
1804560	Metalloy Bright Red Gold	50 - 80 micron	Bright metallic gold
1804580	Metalloy Royal Blue	30 - 60 micron	Metallic blue lustre
1804590	Metalloy Bright Royal Blue	50 - 80 micron	Bright metallic blue
1804610	Metalloy Olive Green	30 - 60 micron	Metallic green lustre
1804620	Metalloy Bright Olive Green	50 - 80 micron	Bright metallic green
1804650	Metalloy Bright Orange	50 - 80 micron	Bright metallic orange
1804570	Metalloy Copper	30 - 60 micron	Metallic copper lustre
1850700	Metalloy VMP010-EA	+/- 10 micron	High reflective metallic



General formulation do's and don'ts

High shear

Avoid high shear. High shear can cause deformation and degradation of the metallic flakes, resulting in a darker and less metallic look from the presence of fines and surface distortions. Furthermore, extreme degradation can expose unprotected metal surfaces and increase the potential for chemical reaction with components in the formulation.

Stability in aqueous formulations

GEOTECH does not recommend to use the Metalloy® pigments in aqueous formulations.

Stability in anhydrous formulations

With normal processing and cooling rates, Metalloy® pigments are stable in nitrocellulose and waxed based formulations.



Finished product	Level of use (recommendation)
Pressed powder	20 - 45 %
Loose powder	Up to 100 %
Blusher	1 - 5 %
Face powder	1 - 5 %
Body powder	1 - 5 %
Lipstick	12 - 20 %
Lip gloss	0,5 - 3 %
Lip lacquer	2 - 15 %
Nail polish	2 - 5 %



Formulation guideline | Pressed powder





Product: Pressed Powder
 Code: GL-203315
 Special effect pigment: Metalloy Bright Royal Blue | Metalloy Bright Olive Green | Sunrise SVA | Sunrise 970

Product name	INCI name	% WT.	Supplier
Phase A			
Sunrise SVA	Mica Lauroyl Lysine	10.00	Geotech International B.V.
Sunrise 970	Mica	7.00	Geotech International B.V.
Zinc Stearate	Zinc Stearate	7.00	
Boroneige 1501	Boronitride	2.50	ESK
Luzenac 00	Talc	23.50	Luzenac
Phase B			
Fragrance		q.s.	
Anti-oxidant		q.s.	
Preservative		q.s.	
Phase C			
Metalloy Bright Royal Blue	Aluminium Silicon Dioxide CI 77510	20.00	Geotech International B.V.
Metalloy Bright Olive Green	Aluminium Silicon Dioxide CI 77491 CI 77510	20.00	Geotech International B.V.
Phase D			
DC 200 Fluid 5cts	Dimethicone	5.00	Dow Corning
DC 9040 Elastomer	Cyclopentasiloxane Dimethicone Crosspolymer	5.00	Dow Corning

Procedure

1. Pre-mix phase A and add phase B, mix until uniform;
2. Pre-mix phase C and add to phase AB, mix until uniform;
3. Pre-mix phase D and add to phase ABC, mix until uniform;
4. Press the powder



Art. nr.	Product name					Aluminium (CI 77000)	Silicon Dioxide	Ferric Ferrocyanide (CI 77510)	Red Iron Oxides (CI 77491)	Ethyl Acetate
1804510	Metalloy Bright Shining Silver	⊙	●	●	●	X	X			
1804520	Metalloy Sparkling Shining Silver	⊙	●	●	●	X	X			
1804550	Metalloy Red Gold	⊙	●	●	●	X	X	X		
1804560	Metalloy Bright Red Gold	⊙	●	●	●	X	X	X		
1804580	Metalloy Royal Blue	⊙	●	●	●	X	X	X		
1804590	Metalloy Bright Royal Blue	⊙	●	●	●	X	X	X		
1804610	Metalloy Olive Green	⊙	●	●	●	X	X	X	X	
1804620	Metalloy Bright Olive Green	⊙	●	●	●	X	X	X	X	
1804650	Metalloy Bright Orange	⊙	●	●	●	X	X	X		
1804570	Metalloy Copper	⊙	●	●	●	X	X	X		
1850700	Metalloy VMP010-EA			●		X				X

- Global approval
- ⊙ European and Japanese approval



Available packaging

Metalloy® pigment

Nett weight	Gross weight	Package size L x W x H
1 kg	2 kg	15 x 15 x 15 cm
5 kg	6 kg	35 x 18 x 21 cm
10 kg	11 kg	30 x 30 x 30 cm

Packed in a plastic bag in cardboard box

Metalloy® VMP

Nett weight	Gross weight	Package size D x H
1 kg	1,2 kg	11 x 19 cm
4 kg	5 kg	18 x 23 cm

Packed in a metal can

Shelf life

Metalloy® pigment: 5 years original packaging in a closed box under dry conditions.

Metalloy® VMP: 1 year original packaging in a closed can under dry conditions.

Samples

Approx. 50 grams samples are available free of charge.

Product data

Product data sheets and additional technical product information are available online. To get access please send an email to marketing@geotech.nl and ask for an account.



About us

Geotech International B.V., based in Haarlem, The Netherlands, is a dynamic company focusing on the development, production and distribution of special effect pigments. The owners family has a background in the industry with over 40 years of experience. Since 1999 the company is managed by the third generation.

GEOTECH's special effect pigments are being used globally in the cosmetics, plastics, coatings & paints, printing and arts & crafts industry.

Disclaimer

All information and samples provided by GEOTECH are given in good faith and without warranty. Our advice does not release you from the obligation to verify the information provided 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.



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