

GIGA



**Geoparl**<sup>®</sup>  
PEARLESCENT PIGMENTS

**conventional natural mica pearlescent pigments  
for coatings & paints**

## Traditional mica based pearlescent pigments

Geoparl® pearlescent pigments create an infinite range of visual effects that capture your eyes and give unrivalled elegance to coatings & paints. The extensive portfolio contains over 100 natural mica based pearlescent pigments which provide luxury to colour coatings and paints products.

The characteristic shimmer of Geoparl® has been designed to match the unique lustre of natural pearls. The basic structure is a platelet of mica which is coated with a metal oxide. We offer titanium dioxide and iron oxide coated pearlescent pigments.

Resulting from reflected, refracted and transmitted light patterns developed at the multiple interfaces between the layers, Geoparl® pearlescent pigments provide unsurpassed performance in brightness and colour play.

## Product benefits

- Batch to batch consistency
- Wide product range with > 100 products
- Stability of the products in aqueous and solvent based systems
- In compliance with global regulations for coatings & paints

## Applications

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



Spray coating



Cast flooring



Aerosols



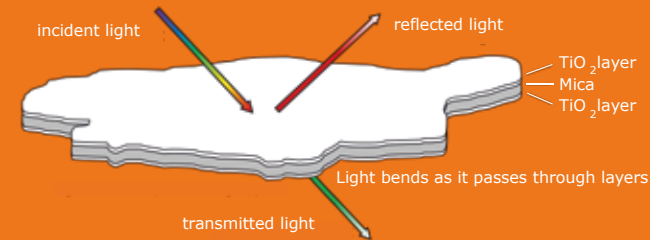
Powder coating



Decorative paints

## The effect

The colour of Geoparl® pigments is obtained by interference, a phenomenon that occurs when visible light passes through thin layers with different refractive indices.








Natural mica is the base for our Geoparl® pigments. It has a lamellar structure which is perfect for obtaining the interference effect. The transparent flakes are coated on all sides with a thin layer of titanium dioxide and/or iron oxide, effectively helping to reflect and bend the light.



## Silver/White pigments

A range of brilliant silver/white pigments in a variety of particle sizes, ranging from 1 – 15 micron up to 50 – 500 micron. Depending on their particle size and composition these pigments provide different lustrous effects ranging from soft/satin to twinkling.

Art. nr.	Product name	Particle size	Effect					
1117000	Geoparl Soft Silver I	1 – 15 micron	Silver/white satin lustre	●	●	●		●
1117010	Geoparl Silk Silver I	5 – 25 micron	Silver/white silk lustre	●	●	●		●
1117020	Geoparl Silver I	10 – 60 micron	Silver/white lustre	●	●	●	●	●
1117060	Geoparl Extra Bright Silver I	30 – 100 micron	Silver/white bright	●	●	●	●	●
1117070	Geoparl Sparkling Silver I	20 – 150 micron	Silver/white sparkling				●	●
1117075	Geoparl Extra Sparkling Silver I	40 – 200 micron	Silver/white sparkling				●	●
1117072	Geoparl Glittering Silver I	20 – 250 micron	Silver/white glittering				●	●
1117090	Geoparl Twinkling Silver I	50 – 500 micron	Silver/white twinkling				●	●






● Recommended





## Interference pigments

The portfolio of interference pigments contains a variety of colours in particle sizes of 5 – 25 micron, 10 – 60 micron and 10 – 100 micron. It allows formulators to create subtle silk effects with high hiding power up to bright interference effects in combination with transparency. Geopearl interference pigments can be combined with other pigments to create an endless variety of shades.

Art. nr.	Product name	Particle size	Effect					
1127405	Geopearl Silk Gold I	5 – 25 micron	Interference silk gold lustre	●	●	●		●
1127510	Geopearl Silk Red I	5 – 25 micron	Interference silk red lustre	●	●	●		●
1127560	Geopearl Silk Violet I	5 – 25 micron	Interference silk violet lustre	●	●	●		●
1127610	Geopearl Silk Blue I	5 – 25 micron	Interference silk blue lustre	●	●	●		●
1127660	Geopearl Silk Green I	5 – 25 micron	Interference silk green lustre	●	●	●		●
1127410	Geopearl Gold I	10 – 60 micron	Interference gold lustre	●	●	●	●	●
1127470	Geopearl Orange I	10 – 60 micron	Interference orange lustre	●	●	●	●	●
1127520	Geopearl Red I	10 – 60 micron	Interference red lustre	●	●	●	●	●
1127710	Geopearl Fuchsia I	10 – 60 micron	Interference fuchsia lustre	●	●	●	●	●
1027570	Geopearl Violet I	10 – 60 micron	Interference violet lustre	●	●	●	●	●
1127620	Geopearl Blue I	10 – 60 micron	Interference blue lustre	●	●	●	●	●
1127670	Geopearl Green I	10 – 60 micron	Interference green lustre	●	●	●	●	●
1127420	Geopearl Bright Gold I	10 – 100 micron	Interference bright gold	●	●	●	●	●
1127530	Geopearl Bright Red I	10 – 100 micron	Interference bright red	●	●	●	●	●
1117580	Geopearl Bright Violet I	10 – 100 micron	Interference bright violet	●	●	●	●	●
1127630	Geopearl Bright Blue I	10 – 100 micron	Interference bright blue	●	●	●	●	●
1127680	Geopearl Bright Green I	10 – 100 micron	Interference bright green	●	●	●	●	●

● Recommended

## Golden pigments

A range of intense golden lustrous pigments that add luxury to your products. This portfolio of golden shades is available in a variety of colour tones and particle sizes, ranging from silk 5 – 25 micron to sparkling 20 – 150 micron. Geopearl® golden pigments can be combined with other pigments to create an endless variety of shades.






Art. nr.	Product name	Particle size	Effect					
1137100	Geopearl Silk Sun Gold I	5 – 25 micron	Silk gold lustre	●	●	●		●
1117110	Geopearl Silk Red Gold I	5 – 25 micron	Silk red gold lustre	●	●	●		●
1117290	Geopearl Silk Royal Gold I	5 – 25 micron	Silk warm gold lustre	●	●	●		●
1137135	Geopearl Majestic Gold I	10 – 60 micron	Traditional gold lustre	●	●	●	●	●
1117280	Geopearl Solar Gold I	10 – 60 micron	Warm sun gold lustre	●	●	●	●	●
1137120	Geopearl Yellow Gold I	10 – 60 micron	Yellow light gold lustre	●	●	●	●	●
1117170	Geopearl Deep Gold I	10 – 60 micron	Warm deep gold lustre	●	●	●	●	●
1117285	Geopearl Ultra Gold I	10 – 60 micron	Warm deep gold lustre	●	●	●	●	●
1113170	Geopearl Sun Gold I	10 – 60 micron	Sun gold lustre	●	●	●	●	●
1137150	Geopearl Red Gold I	10 – 60 micron	Deep red gold lustre	●	●	●	●	●
1137130	Geopearl Lemon Gold I	10 – 60 micron	Light lemon gold lustre	●	●	●	●	●
1137121	Geopearl Bright Yellow Gold I	10 – 100 micron	Bright yellow gold	●	●	●	●	●
1137151	Geopearl Bright Red Gold I	10 – 100 micron	Bright red gold	●	●	●	●	●
1117133	Geopearl Sparkling Lemon Gold I	20 – 150 micron	Sparkling lemon gold				●	●

● Recommended



## Metallic pigments

Our Geopearl® metallic pigments offer warm earth tone colours such as bronze, copper, russet and warm red. They are composed of natural mica coated with iron oxide.




Art. nr.	Product name	Particle size		Effect					
1117300	Geopearl Silk Bronze I	5 – 25	micron	Metallic silk bronze lustre	●	●	●		●
1117350	Geopearl Silk Copper I	5 – 25	micron	Metallic silk copper lustre	●	●	●		●
1117360	Geopearl Silk Russet I	5 – 25	micron	Metallic silk red lustre	●	●	●		●
1147310	Geopearl Bronze I	10 – 60	micron	Metallic bronze lustre	●	●	●	●	●
1147340	Geopearl Copper I	10 – 60	micron	Metallic copper lustre	●	●	●	●	●
1147370	Geopearl Russet I	10 – 60	micron	Metallic red lustre	●	●	●	●	●
1147320	Geopearl Bright Bronze I	10 – 100	micron	Metallic bright bronze	●	●	●	●	●
1117370	Geopearl Bright Copper I	10 – 100	micron	Metallic bright copper	●	●	●	●	●
1117380	Geopearl Bright Russet I	10 – 100	micron	Metallic bright russet	●	●	●	●	●

● Recommended



## Colour travel pigments

Our colour travel pigments display exciting metallic colour shifting effects depending on the viewing angle. The Geoparl® colour travel range comes in 5 shades with a particle size of 10 – 60 micron.

Art. nr.	Product name	Particle size	Effect			
1118200	Geoparl CT Red to Gold	10 – 60 micron	Colour shift red to gold	●	●	●
1118300	Geoparl CT Fuchsia to Gold	10 – 60 micron	Colour shift fuchsia to gold	●	●	●
1118150	Geoparl CT Violet to Orange	10 – 60 micron	Colour shift violet to orange	●	●	●
1118250	Geoparl CT Blue to Red	10 – 60 micron	Colour shift blue to red	●	●	●
1118100	Geoparl CT Green to Red	10 – 60 micron	Colour shift green to red	●	●	●

● Recommended



## General formulation do's and don'ts

### Avoid high shear or grinding

High shear and grinding can break the larger Geopearl® particles into smaller pieces which might result in a poor lustre effect. For improved handling pre-wetting the pigments is recommended by making a premix in vehicle (water or solvents) under slow stirring conditions.

### Settling prevention

Pearlescent pigments, like many inorganic pigments, have a tendency to settle in a paint formulation due to their high specific gravity. Therefore a good suspension is needed by increased viscosity of the paint vehicle or by adding special additives (thixotropy or suspending agents). Building an associated network in the paint vehicle will 'hold' the pigment particles and reduce the settling tendency.

### Colour mixing

Unlike traditional pigments, iridescent pearls reflect, refract and transmit light and follow an additive colour mixing scheme. A mix of blue and yellow interference pearls will yield a white reflection rather than the expected green (= subtractive colour mixing). This is why only limited mixing (so called tinting) of interference pigments is advised.



Finished product	Level of use (recommendation)
Spray coating	1 - 10 % (topcoats 1 - 3 %)
Powder coating	3 - 5 %
Aerosols	1 - 5 %
Cast flooring	1 - 10 %
Decorative paints	10 - 15 % (topcoats 1 - 3 %)





## Available packaging

Nett weight	Gross weight	Package size L x W x H
1 kg	2 kg	18 x 18 x 21 cm
5 kg	6 kg	35 x 18 x 21 cm
25 kg	27 kg	40 x 40 x 50 cm

Packaged in a plastic bag in a cardboard box.

## Shelf life

10 years in original packaging stored in a closed box 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](mailto: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.



Geotech International B.V.  
P.O. Box 1578  
2003 BP Haarlem  
The Netherlands

T: +31(0)235317553  
E: info@geotech.nl  
URL: geotech.nl



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