



Geoppearl[®]

CRYSTAL PEARLESCENT PIGMENTS

Geoparl Crystal: Synthetic mica based pearlescent pigments



Geoparl® Crystal is a range of premium quality synthetic pearlescent pigments suitable for coatings and paints applications.

The characteristic shimmer of Geoparl® Crystal pearlescent pigments has been designed to more intense interference and more pure colour tones as copied to natural pearls. The basic structure is a of platelet synthetic mica which is coated with a metal oxide. GEOTECH offers titanium dioxide and iron oxide coated synthetic pearlescent pigments.

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

The product range includes the following types:

- Crystal silver/white synthetic mica based pearlescent pigments
- Crystal interference synthetic mica based pearlescent pigments
- Crystal golden synthetic mica based pearlescent pigments
- Crystal metallic synthetic mica based pearlescent pigments
- Crystal colour travel synthetic mica based pearlescent pigments

Reflective effects from matte softness (1 – 5 micron) to scattering reflection (100 – 1000 micron) can be obtained by a wide variety of particle sizes. The total range contains over 100 products.

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

Recommended applications



- Spray coating



- Powder coating



- Aerosols



- Cast flooring



- Decorative paints



PRODUCT RANGE

Crystal Silver/Icey White/Rainbow pigments

Art. Nr.	Product	Particle Size (µm)					
1115525	Geoparl Crystal Matte Silver	1 - 5	X	X	X		
1115500	Geoparl Crystal Soft Silver	1 - 15	X	X	X		
1115510	Geoparl Crystal Silk Silver	5 - 25	X	X	X		X
1115520	Geoparl Crystal Silver	10 - 60	X	X	X	X	X
1115530	Geoparl Crystal Bright Silver	10 - 100	X	X	X	X	X
1115535	Geoparl Crystal Sparkling Silver	20 - 150				X	X
1115540	Geoparl Crystal Glittering Silver	40 - 250				X	X
1115640	Geoparl Crystal Icy White	10 - 60	X	X		X	X
1115650	Geoparl Crystal Sparkling Icy White	30 - 120				X	X
1115700	Geoparl Crystal Glittering Icy White	100 - 260	X	X	X	X	X
1115543	Geoparl Crystal Sparkling Rainbow	10 - 125				X	X
1115545	Geoparl Crystal Glittering Rainbow	40 - 200				X	X
1115547	Geoparl Crystal Scattering Rainbow	50 - 1000				X	X

Crystal Interference pigments






Art. Nr.	Product	Particle Size (µm)					
1115795	Geoparl Crystal Silk Gold	5 - 25	X	X	X	X	X
1115811	Geoparl Crystal Silk Red	5 - 25	X	X	X	X	X
1115819	Geoparl Crystal Silk Violet	5 - 25	X	X	X	X	X
1115829	Geoparl Crystal Silk Blue	5 - 25	X	X	X	X	X
1115839	Geoparl Crystal Silk Green	5 - 25	X	X	X	X	X
1115850	Geoparl Crystal Gold	10 - 60	X	X	X	X	X
1115810	Geoparl Crystal Red	10 - 60	X	X	X	X	X
1115820	Geoparl Crystal Violet	10 - 60	X	X	X	X	X
1115830	Geoparl Crystal Blue	10 - 60					X
1115840	Geoparl Crystal Green	10 - 60	X	X	X	X	X

PRODUCT RANGE

Crystal Interference pigments

Art. Nr.	Product	Particle Size (µm)					
1115850	Geoparl Crystal Bright Gold	10 - 100	X	X	X	X	X
1115860	Geoparl Crystal Bright Red	10 - 100	X	X	X	X	X
1115870	Geoparl Crystal Bright Violet	10 - 100	X	X	X	X	X
1115880	Geoparl Crystal Bright Blue	10 - 100	X	X	X	X	X
1115890	Geoparl Crystal Bright Green	10 - 100	X	X	X	X	X
1115900	Geoparl Crystal Sparkling Gold	20 - 150				X	X
1115910	Geoparl Crystal Sparkling Red	20 - 150				X	X
1115920	Geoparl Crystal Sparkling Violet	20 - 150				X	X
1115930	Geoparl Crystal Sparkling Blue	20 - 150				X	X
1115940	Geoparl Crystal Sparkling Green	20 - 150				X	X
1115550	Geoparl Crystal Glittering Gold	40 - 250				X	X






Crystal Sun Gold pigments

Art. Nr.	Product	Particle Size (µm)					
1115805	Geoparl Crystal Silk Sun Gold	5 - 25	X	X	X		X
1115806	Geoparl Crystal Sun Gold	10 - 60	X	X	X	X	X
1115807	Geoparl Crystal Bright Sun Gold	10 - 100	X	X	X	X	X
1115808	Geoparl Crystal Glittering Sun Gold	50 - 250				X	X
1115809	Geoparl Crystal Scattering Sun Gold	10 - 1000				X	X







PRODUCT RANGE

Crystal Sun Gold pigments






Art. Nr.	Product	Particle Size (µm)					
1116035	Geoparl Crystal Amber	10 - 75	X	X	X	X	X
1116036	Geoparl Crystal Sparkling Amber	20 - 150	X	X		X	X
1116037	Geoparl Crystal Glittering Amber	40 - 300				X	X

Crystal Metallic pigments



Art. Nr.	Product	Particle Size (µm)					
1115948	Geoparl Crystal Soft Beige	1 - 15	X	X	X		X
1115958	Geoparl Crystal Soft Bronze	1 - 15	x	X	X		X
1115963	Geoparl Crystal Soft Copper	1 - 15	X	X	X		X
1115968	Geoparl Crystal Soft Russet	1 - 15	X	X	X		X
1115964	Geoparl Crystal Soft Golden Copper	1 - 15	X	X	X		X
1115950	Geoparl Crystal Silk Beige	5 - 25	X	X	X		X
1115960	Geoparl Crystal Silk Bronze	5 - 25	X	X	X		X
1115965	Geoparl Crystal Silk Copper	5 - 25	X	X	X		X
1115970	Geoparl Crystal Silk Russet	5 - 25	X	X	X		X
1116025	Geoparl Crystal Rufous	10 - 60	X	X	X	X	X
1116000	Geoparl Crystal Glittering Bronze	50 - 250				X	X
1116010	Geoparl Crystal Glittering Copper	50 - 250				X	X
1116020	Geoparl Crystal Glittering Russet	50 - 250				X	X
1116038	Geoparl Crystal Bright Amber	10 - 100	X	X	X	X	X
1115961	Geoparl Crystal Crystal Bronze	10 - 60	X	X	X	X	X
1115966	Geoparl Crystal Crystal Copper	10 - 60	X	X	X	X	X
1116030	Geoparl Crystal Pumpkin Orange	10 - 60	X	X	X	X	X
1115971	Geoparl Crystal Russet	10 - 60	X	X	X	X	X

PRODUCT RANGE

Crystal Titanium pigments

Art. Nr.	Product	Particle Size (µm)					
1116060	Geoparl Crystal Soft Titanium	1 - 15	X	X	X		X
1116065	Geoparl Crystal Titanium	10 - 60	X	X	X	X	X
1116067	Geoparl Crystal Bright Titanium	10 - 100	X	X	X	X	X
1116070	Geoparl Crystal Glittering Titanium	50 - 200				X	X

Colour travel pigments

Art. Nr.	Product	Particle Size (µm)					
1115570	Geoparl Crystal Sparkling Enchanting Blue	20 - 150				X	X
1115580	Geoparl Crystal Sparkling Charming Green	20 - 150				X	X
1115590	Geoparl Crystal Flamboyant Fuchsia	20 - 150				X	X
1115600	Geoparl Crystal Sparkling Magical Gold	20 - 150				X	X
1115610	Geoparl Crystal Luxury Twinkle	30 - 180				X	X
1115585	Geoparl Crystal Glittering Charming Green	100 - 260				X	X
1115575	Geoparl Crystal Glittering Enchanting Blue	100 - 260				X	X
1115595	Geoparl Crystal Glittering Flamboyant Fuchsia	100 - 260				X	X
1115605	Geoparl Crystal Glittering Magical Gold	100 - 260				X	X

Order details

Available packaging

- 1 kg Nett weight
- 5 kg Nett weight
- 25 kg Nett weight

Shelf life

- 10 years original packaging stored in a closed box under dry conditions

Product data

- Product data sheets and additional technical product information are available on <https://geotech.nl/>



GENERAL FORMULATION DO'S AND DON'TS

Avoid high shear or grinding

High shear and grinding can break the larger Geoparl® Crystal 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.

Concentration

Finished product	Recommended level of use
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)

ABOUT US

Geotech International B.V., founded in 1984, manufactures and distributes special effect pigments. We are a privately owned family business with offices in The Netherlands, France and Turkey. A global sales network serves over 800 customers worldwide with 16 product lines.

Nowadays the company is managed by the third generation, focusing on innovation and sustainability. Since 2020, Ecovadis awarded GEOTECH's sustainability program a Gold medal every year, placing us in the top 5% of companies assessed by them. A certified quality management system based on ISO 9001 and GMP standards ensures reliability and excellence.

With over 450 special effect pigments in our portfolio we offer a diverse range of products for the coatings & paints industry. An experienced team of specialists is available to provide you with a high level of service and technical support.

GEOTECH's special effect pigments are used globally in various industries to differentiate consumer products by creating attractive and luxurious appearances.



Coatings

GEOTECH supplies effect pigments for interior and exterior applications, printing inks, aerosols, textile, glass and seed coatings. Pearlescent pigments based on mica, synthetic mica and borosilicate create unique luster and color effects that otherwise occur only in nature. These effects are available from silver-white, red and bronze-colored earth tones and interference to gold luster. Effects from shimmer to glitter are possible, depending on the particle size distribution.



Explore our complete portfolio for the coatings and paints industry at www.geotech.nl



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