



**Geocrystal**<sup>®</sup>

IRIDESCENT GLITTER

**premium brilliant rainbow particles  
for cosmetics**

## Iridescent glitter for cosmetics

Geocrystal® glitter are brilliantly coloured particles of precision cut polyester film which refracts light in all colours of the rainbow.

In colour cosmetics Geocrystal® is used as a colour flake for all kind of formulations. Because of the transparency of Geocrystal®, this glitter provides an effect which changes with each background it is applied on.

The Geocrystal® C range is designed for pressed powders, lipsticks and gel based formulations. For solvent based nail polish a special grade is available under the name Geocrystal® SR.

These iridescent glitter are available in particle sizes from 100 micron (0.004 inch) up to 3 mm (0.125 inch). The particles have a thickness of approximately 30 micron. Geocrystal® is heat resistant up to 100 degrees Celsius.

The Geocrystal® C and Geocrystal® SR product lines are in compliance with cosmetic regulations in Europe, the United States and Japan.

## Product benefits

- Stable in water based formulations
- Aluminium free
- Globally approved for cosmetic applications

## Applications

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



Lip area



Eye area



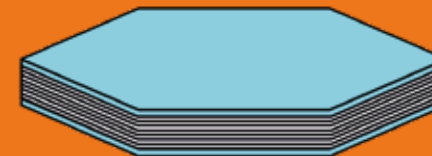
Nail



External

## The effect

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



Thin alternating layers of polymer make up the base for our Geocrystal® glitter resulting in an interference rainbow effect. The precision cut particles can be (transparent) colour coated, adding to the colour range that can be achieved. As the particles are transparent the obtained color effect will change depending on the colour of the background they are applied on, resulting in an even wider colour effect gamut.

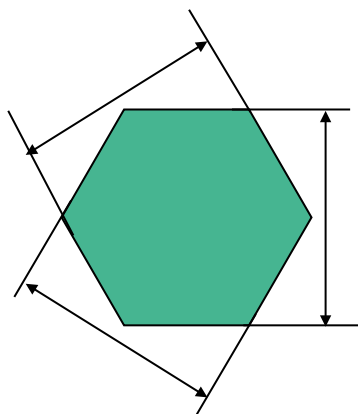


Product name	Effect
Geocrystal C Red Red	Iridescent particles with red reflection
Geocrystal C Red Green	Iridescent particles with green reflection
Geocrystal C Blue Green	Iridescent particles with blue reflection
Geocrystal C Blue Violet	Iridescent particles with violet reflection
Geocrystal C Multicolour	Iridescent particles with rainbow reflection
Geocrystal C Lemon	Iridescent yellow particles with green reflection
Geocrystal C Raspberry	Iridescent red particles with yellow reflection
Geocrystal C Blueberry	Iridescent blue particles with green reflection
Geocrystal C Lime	Iridescent green particles with blue reflection
Geocrystal Red Red SR	Iridescent particles with red reflection
Geocrystal Red Green SR	Iridescent particles with green reflection
Geocrystal Blue Green SR	Iridescent particles with blue reflection
Geocrystal Blue Violet SR	Iridescent particles with violet reflection
Geocrystal Multicolour SR	Iridescent particles with rainbow reflection



**Particle sizes available hexagonal**

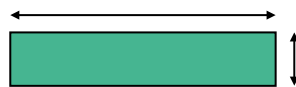
inch	micron
004	100
006	150
008	200
015	400
025	600
040	1000
062	1600
094	2400
125	3100



Hexagonal

**Particle sizes available rectangular**

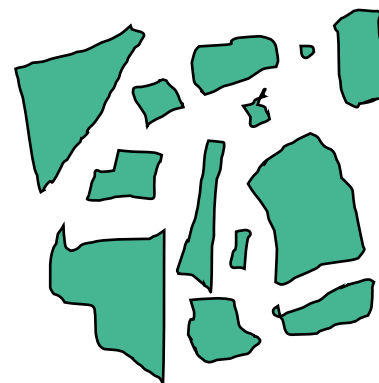
inch	micron
062 x 0125	1600 x 310
125 x 0125	3100 x 310



Rectangular

**Particle sizes available random**

inch	micron
035	see footnote



Random

\* Other particle sizes are available upon request.

\* Particle sizes mentioned in the product names are indicative. More detailed information about exact particle sizes of glitter is available in the Product Properties & Declaration file.

\* The 035 designation refers to the process used to achieve the final product rather than it designating particle size. There can be a small variation in the particle size distribution from product to product.



## General formulation do's and don'ts

### Suitable for water based formulations

Geocrystal® C iridescent glitter is suitable for water based formulations.

### UV stability

Geocrystal® C glitter without cosmetic colourants are stable to UV light. Geocrystal® C products which contain colourants can be sensitive to UV light.

### Solvent resistance

Geocrystal® SR (Solvent Resistant) is suitable for solvent based formulations like nail polish.

### Temperature resistance

Geocrystal® C iridescent glitter is heat resistant up to a maximum temperature of 100°C.

Finished product	Level of use (recommendation)
Eye shadow gel	15 - 20 %
Pressed powder	30 - 50 %
Loose powder	up to 100 %
Blusher	1 - 5 %
Face/body powder	1 - 5 %
Lipstick	12 - 20 %
Lip balm /gloss	3 - 5 %
Lip lacquer	10 - 15 %
Nail Enamel*	1 - 10 %
Bodylotion	1 - 3 %

\* Solvent resistant (SR) range only



## Formulation guideline | Nail Polish

Product: Nail Polish  
 Code: GL-210505  
 Special effect pigment: Geocrystal Multicolour SR 035 Random x 001

Product name	INCI name	% WT.	Supplier
<b>Phase A</b>			
PC605 Peel Off Glitter Suspension Base	proprietary information	97.50	Centre 7
Geocrystal Multicolour SR 035 Random x 001	Polyethylene Terephthalate   Polymethyl Methacrylate	2.50	Geotech International B.V.

### Procedure

1. Combine all ingredients and mix until homogeneous
2. Fill into container.



## Formulation guideline | Lip gloss





Product: Lip gloss  
 Code: GL-210502  
 Special effect pigment: Geocrystal C Raspberry 008 HEX x 001

Product name	INCI name	% WT.	Supplier
<b>Phase A</b>			
Versagel ME 750	Hydrogenated Polyisobutene   Ethylene/Propylene/ Styrene Copolymer   Butylene/Ethylene/Styrene Copolymer	74.90	Calumet Penreco
Jojoba Oil	Simmondsia Chinensis (Jojoba) Seed Oil	2.20	Sigma Oil Seeds
Silcare Silicone 31M50	Caprylyl Trimethicone	7.80	Clariant
Silcare Silicone 41M65	Stearyl Dimethicone	3.60	Clariant
Nexbase 2002	Hydrogenated Polydecene	4.50	Neste Oil
Crodamol IPM	Isopropyl Myristate	5.00	Croda
<b>Phase B</b>			
Geocrystal C Raspberry 008 HEX x 001	Polyethylene Terephthalate   Acrylates copolymer   CI 16035	2.00	Geotech International B.V.

### Procedure

1. Combine all ingredients of phase A and heat to 85°C
2. Cool to 65°C and add phase B to phase A and mix until homogeneous
3. Pour into lip gloss container



Product name	 Lip area	 Eye area	 External (nail)	 External	Polyethylene Terephthalate	Acrylates Copolymer	Polymethyl Methacrylate	FD&C Yellow 5 (CI 19140)	FD&C Red 40 (CI 16035)	FD&C Blue 1 (CI 42090)
Geocrystal C Red Red	●	●		●	X	X				
Geocrystal C Red Green	●	●		●	X	X				
Geocrystal C Blue Green	●	●		●	X	X				
Geocrystal C Blue Violet	●	●		●	X	X				
Geocrystal C Multicolour	●	●		●	X	X				
Geocrystal C Lemon	●	●		●	X	X		X		
Geocrystal C Raspberry	○	○		○	X	X			X	
Geocrystal C Blueberry	●	●		●	X	X				X
Geocrystal C Lime	●	●		●	X	X		X		X
Geocrystal Red Red SR	●	●	●	●	X		X			
Geocrystal Red Green SR	●	●	●	●	X		X			
Geocrystal Blue Green SR	●	●	●	●	X		X			
Geocrystal Blue Violet SR	●	●	●	●	X		X			
Geocrystal Multicolour SR	●	●	●	●	X		X			

- Global approval
- European and United States approval





## Available packaging

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Geocrystal® C / Geocrystal® SR

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

Packed in a plastic bag in a cardboard box.

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Geocrystal® SR Random

Nett weight	Gross weight	Package size L x W x H
25 kg	27 kg	40 x 40 x 50 cm

Packed in a plastic bag in a cardboard box.

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## Shelf life

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10 years original packaging stored in a closed box under dry conditions.  
Coloured Geocrystal® has a shelf life of 2 years.

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## Samples

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Approx. 50 grams samples are available free of charge.

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## Product data

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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.

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## About us

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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.

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## Disclaimer

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

T: +31(0)235317553  
E: [info@geotech.nl](mailto:info@geotech.nl)  
URL: [geotech.nl](http://geotech.nl)



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