





## Geometal: premium metallic particles for plastics



Geometal<sup>®</sup> aluminium glitter are brilliant particles of precision cut aluminium foil. They are used as colour flakes in plastic applications such as extrusion, co-extrusion and injection molding. The particles can be incorporated into colour concentrates, named masterbatches, to give elegant silver spots or an artificial marble effect. Well known applications are household equipments such as water heaters, coffee machines, waste baskets, tooth brushes and electric razors. In ABS plastics Geometal<sup>®</sup> is used in dashboards to create metallic sparkling effects.

The main characteristics of these aluminium glitter are high temperature (approx. 250 degrees Celsius) and good solvent resistance.

Geometal<sup>®</sup> aluminium glitter are available in three shades; silver, black and holographic. Geometal<sup>®</sup> Holo is cut out of 25 micron. Each colour is available in particle sizes of 100 micron, 200 micron and 400 micron.

#### **Product benefits**

- High temperature resistance
- In compliance with regulations for plastics; including food contact

#### Order details

#### Available packaging

- 5 kg Nett weight
- 25 kg Nett weight

### Shelf life

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

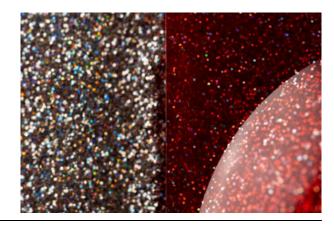
### **Product data**

Product data sheets and additional technical product information are available on <a href="https://geotech.nl/">https://geotech.nl/</a>

### Recommended applications



- Masterbatch



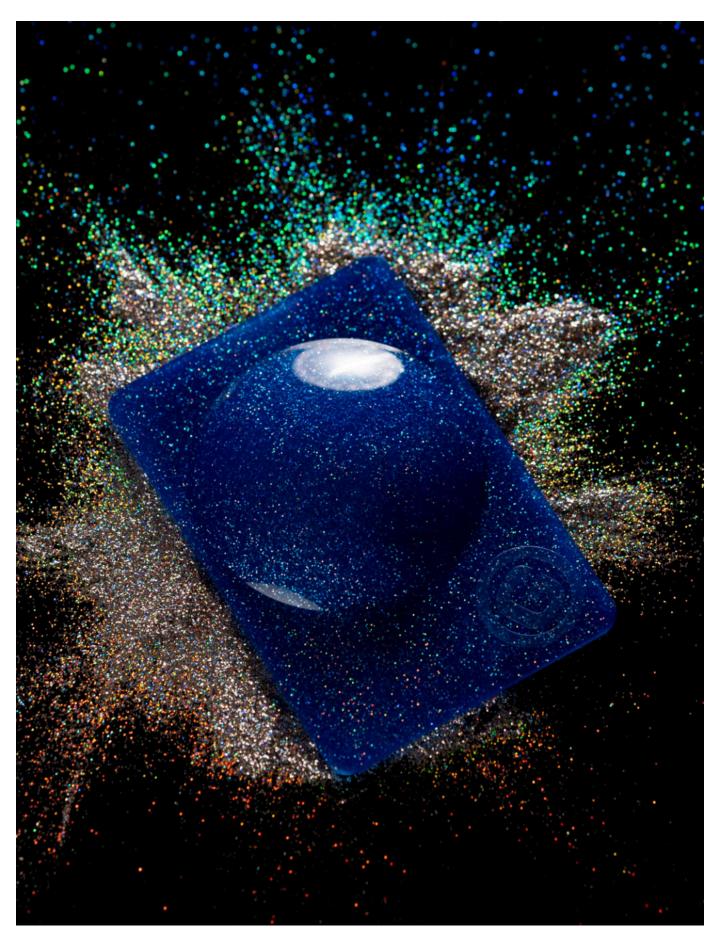




# **PRODUCT RANGE**

Art. Nr.	Product	Particle Size (µm)
1704852	Geometal Black 004 HEX x 00045	100
1704857	Geometal Black 008 HEX x 00045	200
1704860	Geometal Black 015 HEX x 00045	400
1704103	Geometal Silver 004 HEX x 00045	100
1704107	Geometal Silver 008 HEX x 00045	200
1704110	Geometal Silver 015 HEX x 00045	400
1704120	Geometal Holo Silver 004 HEX x 001	100
1704125	Geometal Holo Silver 006 HEX x 001	150
1704122	Geometal Holo Silver 008 HEX x 001	200
1704123	Geometal Holo Silver 015 HEX x 001	400

# **FORMULATION GUIDELINES**





## **GENERAL FORMULATION DO'S AND DON'TS**

#### **High shear**

Avoid high shear. Geometal<sup>®</sup> glitter are made out of a pigment coated aluminium film. The coating layer is sensitive to a combination of friction and temperature. As a result the coating layer might shear off which results in a silver particle.

#### **Solvent resistance**

Geometal<sup>®</sup> glitter products are resistant against the following solvents: 2-butanone, acetone and ethyl acetate.

#### **Temperature resistance**

Temperature resistance of Geometal<sup>®</sup> is tested in polypropylene, processed in a single screw injection chiping machine. Although Geometal<sup>®</sup> has endured exposure up to 265°C with no apparent loss of colour or reflective quality, the actual limit of resistance is dependent upon dwell time, mixing abrasion and ambient process temperature.

## Lightfastness according to ISO 105-B (Blue Wool scale);

Geometal<sup>®</sup> Silver Lightfastness: 7–8; Geometal<sup>®</sup> Black Lightfastness: 4–5.

#### Concentration

Finished product	Recommended level of use
Masterbatch	10 - 20 %

## **Plastic chip samples**

Product: Plastic chip samples

Code: **GLP-201215** 

Special effect pigment: Geometal Black 008 HEX x 0045 | Geometal Black 015 HEX x 0045

Product name	%WT.	Supplier
Plastic chip 1		
Geometal Black 008 HEX x 00045	1.00	Geotech International B.V.
Braskem C705-44NA HP (White PP)	98.00	Braskem Netherlands B.V.
Maxxam 25 T/30 WHITE 70 (MB White)	1.00	Avient Corporation
Plastic chip 2		
Geometal Black 015 HEX x 00045	1.00	Geotech International B.V.
Braskem C705-44NA HP (White PP)	98.00	Braskem Netherlands B.V.
Maxxam 25 T/30 WHITE 70 (MB White)	1.00	Avient Corporation

#### **Procedure**

These chips are manufactured by dry mixing of components using a BOY25E injection molding machine. We recommend to incorporate our special effect pigments into a masterbatch for optimum results. Samples of the chips are available upon request.





## **Plastic chip samples**

Product: Plastic chip samples

Code: **GLP-201212** 

Special effect pigment: Geometal Silver 008 HEX x 0045 | Geometal Silver 015 HEX x 0045

Product name	%WT.	Supplier	
Plastic chip 1			
Geometal Silver 008 HEX x 00045	1.00	Geotech International B.V.	
Braskem Inspire 382 (Clear PP)	98.00	Braskem Netherlands B.V.	
Maxxam 10 T/20 Black T 70 (MB White)	1.00	Avient Corporation	
Plastic chip 2			
Geometal Silver 015 HEX x 00045	1.00	Geotech International B.V.	
Braskem Inspire 382 (Clear PP)	98.00	Braskem Netherlands B.V.	
Maxxam 10 T/20 Black T 70 (MB White)	1.00	Avient Corporation	

#### **Procedure**

These chips are manufactured by dry mixing of components using a BOY25E injection molding machine. We recommend to incorporate our special effect pigments into a masterbatch for optimum results. Samples of the chips are available upon request.



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. GEOTECH's sustainability program has been recognized by EcoVadis for its success, consistently placing us among the top-rated companies they assess. 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 plastics 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.









## **Plastics**

At Geotech International B.V., we support our clients in the plastics industry by testing special effect pigments and conducting quality control with our injection molding machine with different plastic masterbatches.

Our expertise in new effects and pigment applications helps clients achieve unique and high-quality results, enhancing the visual and functional appeal of their plastic products.



Explore our complete porfolio for the plastics industry at www.geotech.nl





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