

## What is Metashine® ?

Microglas® Metashine® is a strongly glittering metallic pigment consisting of metal-coated Glass Flakes.

Each grade consists of a tightly controlled particle size distribution to deliver a range of effects from isolated starlight to a shimmering metallic lustre. These effects are readily achieved at low addition rates even in bases with low transparency. The coated glass flakes are also extremely thin and therefore have a high covering power and good tactile feel on the skin.

Due to its structure of glass and metal the product is very durable and can easily be processed in standard equipment such as polymer extruders and high shear mixers without being degraded

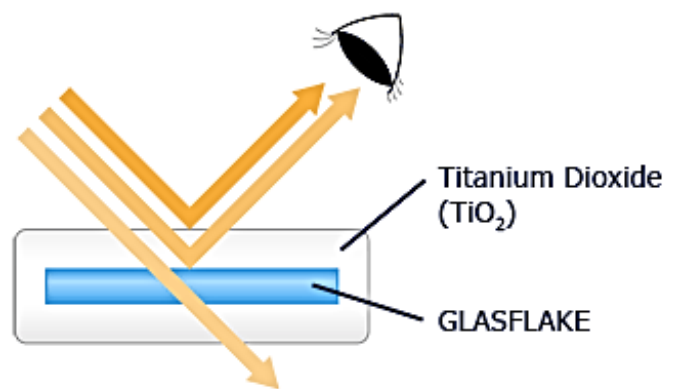
The low addition levels needed to achieve effects using Metashine minimise any changes in the performance or processing characteristics of the base resin and enable it to be used in a broad range of applications.

## Titania Coat Series

### Overview

The METASHINE® Titania Coat Series consists of GLASFLAKE products coated with titanium dioxide. The METASHINE® Titania Coat Series is defined by high transparency and brilliant interference colours. Both glass and titanium dioxide are transparent substances and, therefore, products of this series provide high transparency.

In the light that reflects off the coated layer and glass surface, a difference in optical path is generated. By adjusting the coating thickness of the titanium dioxide, the optical path difference is varied and five colours of interference light are generated.



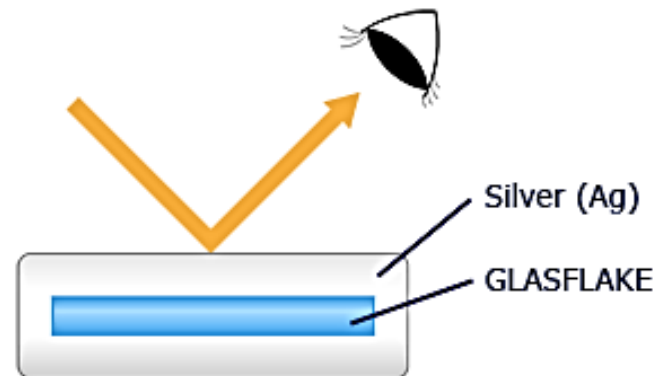


## Silver Coat Series

### Overview

The METASHINE® Silver Coat Series consists of GLASFLAKE products coated with silver. The use of silver achieves remarkably strong brilliance.

There are also additional products coated with pure gold on top of the silver.

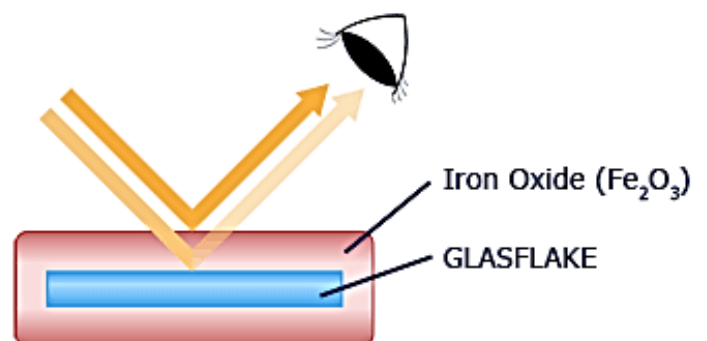


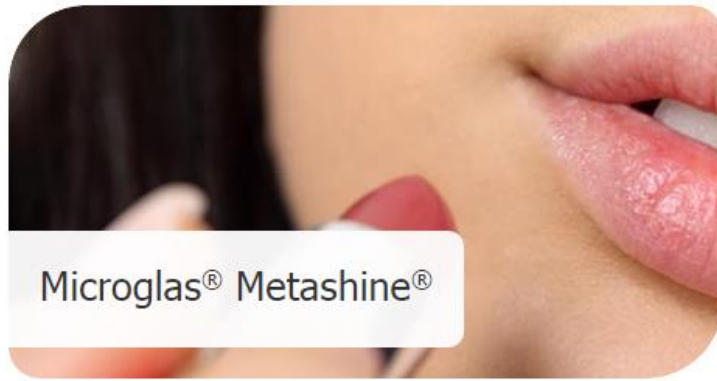
## Iron Oxide Coat Series

### Overview

The METASHINE® Iron Oxide Coat Series consists of GLASFLAKE products coated with iron oxide. With the standard type, gold to russet colour tones specific to iron oxide can be expressed.

A black type with blackness added by reduction-treating the iron oxide layer is also available.





Series	Article No.	Reflected Color	Substrate Thickness (µm)	Ave. Particle Size (µm)	Features	Main Applications	
Titania Coat Series (Standard type)	1020 RS/RY/RR/RB/RG	White, yellow, red	1	20	Products with a glass substrate coated with titanium dioxide. Defined by high transparency and brilliant iris-like pattern.	Paints and varnishes, inks	
	1030 RS/RY/RR/RB/RG		1	30		Paints and varnishes, inks	
	1040 RS/RY/RR/RB/RG		1	40		Paints and varnishes, inks	
	1080 RS/RY/RR/RB/RG		1	80		Plastic, inks	
Titania Coat Series (LUMIGLAN® type)*	1018 RS/RY/RR/RB/RG	Silver	1	18		Paints and varnishes, inks	
	1025 RS/RY/RR/RB/RG		1	25		Paints and varnishes, inks	
Silver Coat Series	5480PS		Silver	5	480	Products with a glass substrate coated with silver. The use of silver, which reflects particularly high visible light compared with other metals, achieves remarkably strong brilliance.	Plastic
	5230PS			5	230		Plastic
	5150PS	5		150	Plastic		
	5090PS	5		90	Plastic		
	2080PS	1		80	Plastic		
	2040PS	1		30	Paints and varnishes, inks		
	2025PS	1		25	Paints and varnishes, inks		
Iron Oxide Coat Series (Standard type)	1030 TY/TZ/TP/TA	Yellow, bronze, copper, russet	1	30	Products with a glass substrate coated with iron oxide. With the standard type, gold to russet color tones specific to iron oxide can be expressed. A black type with blackness added is also available.	Paints and varnishes, inks	
	1080 TY/TZ/TP/TA		1	80		Plastic, inks	
Iron Oxide Coat Series (Black type)	1030 KY/KR/KB	Black yellow, black red	1	30		Paints and varnishes, inks	
	1080 KY/KR/KB		1	80		Plastic, inks	
Pure Gold Coat Series	1030GP	Pure gold	1	30	Products with a glass substrate coated with pure gold. Defined by gorgeous shine of gold.	Paints and varnishes, inks	
	2080GP		1	80		Plastic, inks	

\*Product that can be used easily with paints, varnishes and inks by adjusting the particle size.