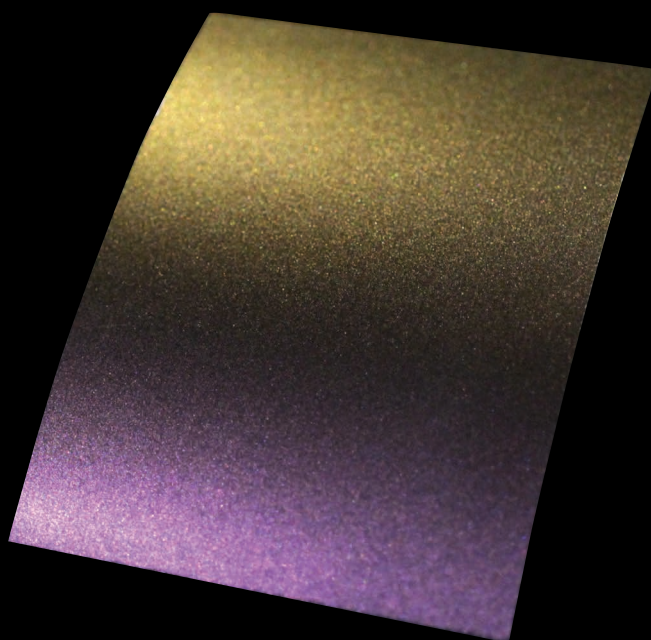




KROMAPEARL

Pearlescent Effect Pigment



Pearlescent and Special Effect Pigment

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Range Overview

The Kromapearl range represents a complete portfolio of high performance pearlescent pigments offering unlimited design possibilities for printed and coated materials and plastics. Products include subtle sheens and shimmers with gentle colour gradations, bright lustres and sparkles with brilliant depth and colour shift. The range enables the creation of uniquely beautiful and eye-catching effects.

The optical effects which can be created with Kromapearl depend largely on particle size, pigment type and substrate. Fine grades offer silky lustre effects with the highest opacity whereas coarser grades are less opaque and exhibit stronger glitter. Since pearlescent pigments are generally semi-transparent a wide variety of colour effects can be achieved by varying the background colour or by combining Kromapearl with transparent pigments. Smooth substrates (or reverse print) will yield better pearlescent effects than irregular or highly absorbent ones.

Kromapearl is suitable for use in almost any application and system including water-based, solvent-based and UV-curing. Temperature resistance is usually excellent with some grades being able to withstand temperatures of up to 8000C.

Weather Resistant Grades (WR)

Kromachem also offer a full range of **Kromapearl WR Series** pearlescent pigments which have a cerium oxide coating for enhanced weathering performance. This makes them particularly suitable for exterior applications which demand excellent resistance properties, especially paints for automotive refinish. Most of the products in this catalogue are available as WR grades. Please ask your representative for further information.

Kromapearl for Coating

Most Kromapearl grades are suitable for coatings applications as particle size is not generally of concern. Grades from below 15 microns up to 1000 microns are available. Kromapearl WR grades with enhanced resistance properties are particularly suitable for exterior applications.

Kromapearl for Printing

Screen printing lends itself very well to the use of Kromapearl pigments to create a wide range of inks suitable for printing on a variety of substrates. Commonly the upper limit for particles in this application is around 200 microns but this can be exceeded with suitable screen technology.

A range of Kromapearl types are suitable for **Gravure printing** where typically particle sizes of up to 70 microns are acceptable. This encompasses the standard 'medium' particle size range for pearlescent pigments of 10-60 microns. Suitable cylinder configurations are 60 – 80 l/cm (160 – 200 l/inch) with a cell depth of 24 – 50 µm.

There is a limited range of Kromapearl pigments with a maximum particle size of 25 microns which are normally suitable for these Flexo printing applications. Occasionally pigments with particle sizes up to 50 microns may be acceptable for Flexo printing where anilox sizes of 80-120 l/cm are usually recommended.

Kromapearl for Plastics

Most Kromapearl grades are suitable for plastics applications. Of particular interest are some of the gold and earth-tone synthetic pigments which exhibit great strength and pearlescent effect in plastics, particularly when used in combination with low levels of carbon black and other pigments.

Kromapearl for Powder Coating

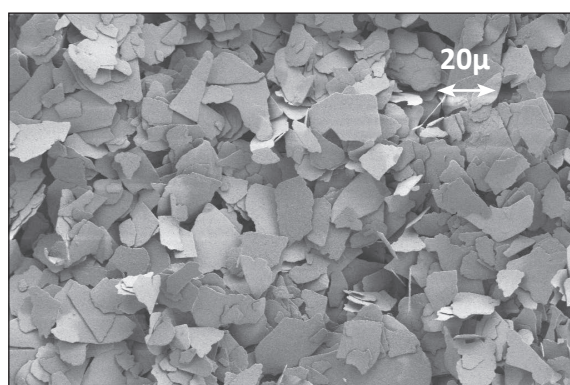
The Kromapearl range includes a number of WR grades which are pre-selected for purity and additionally treated with **cerium oxide** for enhanced weathering resistance making them particularly suitable for powder coating applications.

Kromapearl Pastes

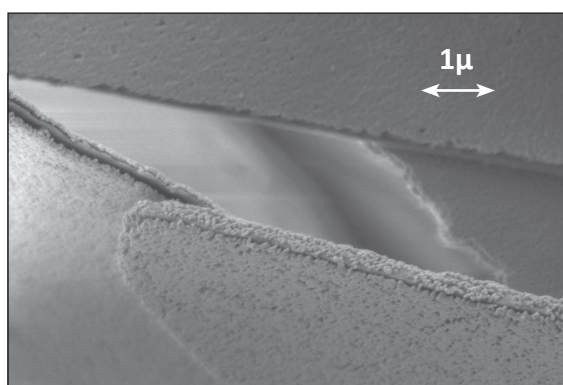
Many Kromapearl grades can be supplied in **damped or paste form** suitable for use in most of the above applications. Please contact your technical representative for details.

Particle Shape and Surfaces

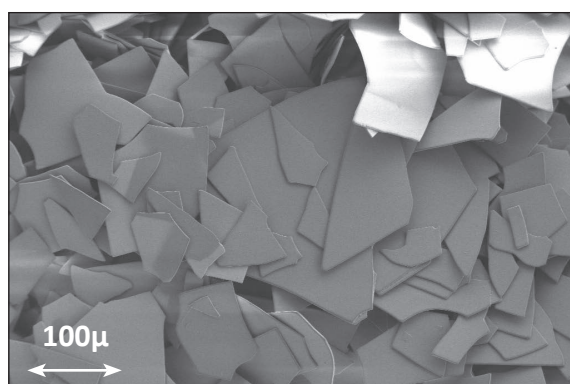
All the particles are flat platelets which will require gentle dispersion. Generally, they are easier to wet than Aluminium pigments – but still benefit from similar guidelines – i.e. a degree of soaking in co-solvent and addition of carefully chosen wetting agents. Most of the pigments will work in either aqueous, solvent or UV systems – but tests should be carried out as some of the surfaces are more hydrophilic than others.



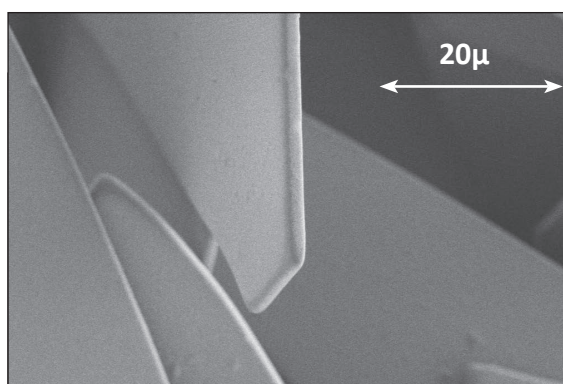
Kromapearl KY504 Russet Magnification 1,000 x



Kromapearl KY504 Russet Magnification 30,000 x



Kromapearl 3D Shift KY1044B Magnification 500 x

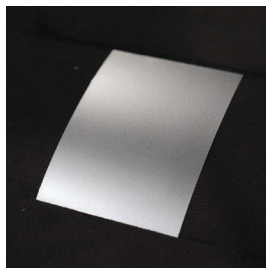


Kromapearl 3D Shift KY1044B Magnification 5,000 x

Most of the product range which are coloured – in particular solid colours, interference and 3D shift contain a second layer of material which is responsible for the colour. Bead milling will destroy the surfaces – and the pigments themselves. Gentle agitation is recommended.

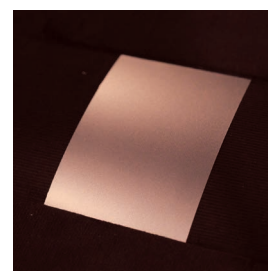
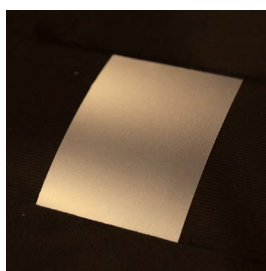
Pigment Types

Whites



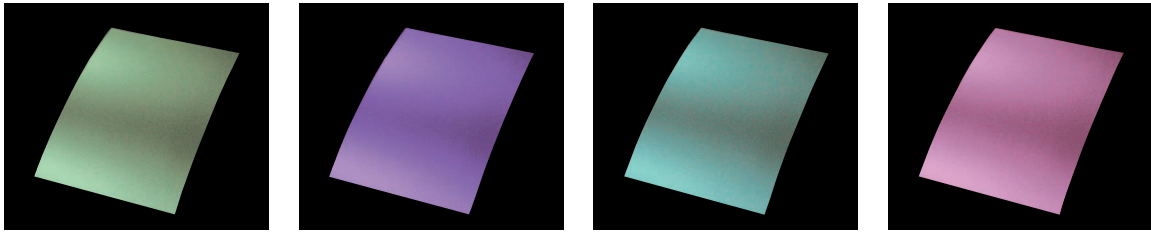
Colour	Product Code	Particle Size Range	Type
Fine Silver	KY111	Fine (<15µm)	Natural Mica - Rutile
Silver White	KY123F	Fine (5-25µm)	Natural Mica - Rutile
Silver White	KY100S	Medium (10-60µm)	Natural Mica - Anatase
White	KY103	Medium (10-60µm)	Natural Mica - Rutile
Silver White	KY1304	Medium (20-80µm)	Natural Mica - Anatase
Silver White	KY153G	Coarse (10-100µm)	Natural Mica - Anatase
Sparkle White	KY163	Coarse (20-180µm)	Natural Mica - Anatase
Silver Grey	KY3535	Fine (<15µm)	Natural Mica - Anatase
Silver Grey	KY6001	Medium (10-60µm)	Natural Mica - Anatase

Bronze, Copper, Gold & Lava



Colour	Product Code	Particle Size Range	Type
Rich Gold	KY383	Fine (1-15µm)	Natural Mica
Satin Gold	KY302	Fine (5-25µm)	Natural Mica - Rutile
Gold	KY326	Fine (5-25µm)	Natural Mica - Rutile
Royal Gold	KY303F	Medium (10-60µm)	Natural Mica - Rutile
Crystal Pure Gold	KY305A	Medium (10-60µm)	Synthetic Mica
Olympic Gold	KY306	Medium (10-60µm)	Natural Mica - Rutile
Turquoise Gold	KY307	Medium (10-60µm)	Natural Mica
Sunlight Gold	KY539	Medium (10-60µm)	Natural Mica
Pale Gold	KY351	Coarse (10-100µm)	Natural Mica
Royal Gold	KY5001	Coarse (10-100µm)	Natural Mica
Red Gold	KY5355	Coarse (10-125µm)	Natural Mica
Bronze	KY500	Medium (10-60µm)	Natural Mica
Bronze	KY431	Coarse (20-100µm)	Natural Mica
Rich Copper	KY384	Fine (1-15µm)	Synthetic Mica
Fine Copper	KY4021	Fine (5-25µm)	Natural Mica
Russet	KY504	Medium (10-60µm)	Natural Mica
Warm Bronze	KY508	Medium (10-60µm)	Natural Mica
Lava Orange	KY3005	Medium (10-60µm)	Natural Mica - Rutile
Lava Red	KY3006	Medium (10-60µm)	Synthetic Mica

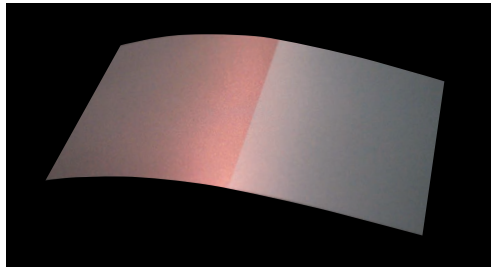
Solid Colours



Colour	Product Code	Particle Size Range	Type
Light Green	KY3336	Medium (10-60µm)	Natural Mica
Apple Green	KY3636	Medium (10-60µm)	Natural Mica
Light Blue	KY3405	Medium (10-60µm)	Natural Mica
Dark Blue	KY3426	Medium (10-60µm)	Natural Mica
Cupreous Brown	KY3410	Medium (10-60µm)	Natural Mica
Fuscos Brown	KY3411	Medium (10-60µm)	Natural Mica
Magenta	KY3415	Medium (10-60µm)	Natural Mica
Scarlet	KY3416	Medium (10-60µm)	Natural Mica
Violet	KY3419	Medium (10-60µm)	Natural Mica
Yellow	KY3421	Medium (10-60µm)	Natural Mica
Bronze	KY3438	Medium (10-60µm)	Natural Mica

Interference Colours

Interference colours exhibit colour only when illuminated from certain angles. The effect is enhanced over a black background.



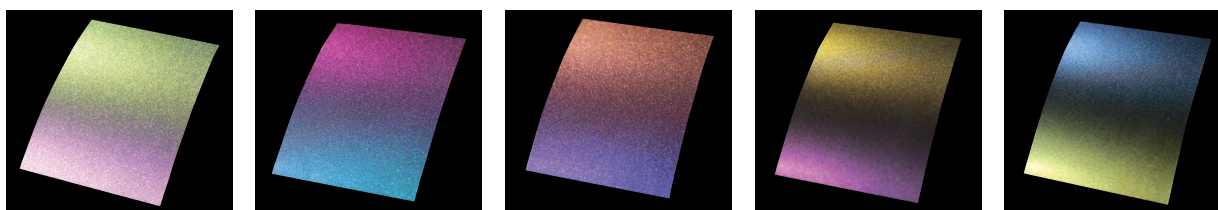
Colour	Product Code	Particle Size Range	Type
Gold	KY149	Fine (1-8µm)	Synthetic Mica
Gold	KY201	Fine (5-25µm)	Natural Mica
Gold	KY205	Medium (10-60µm)	Natural Mica
Gold	KY249	Coarse (10-100µm)	Natural Mica
Red	KY159	Fine (1-8µm)	Synthetic Mica
Red	KY215	Medium (10-60µm)	Natural Mica
Violet	KY169	Fine (1-8µm)	Synthetic Mica
Violet	KY219	Medium (10-60µm)	Natural Mica
Blue	KY189	Fine (1-8µm)	Synthetic Mica
Blue	KY221	Fine (5-25µm)	Natural Mica
Blue	KY225	Medium (10-60µm)	Natural Mica
Green	KY199	Fine (1-8µm)	Synthetic Mica
Green	KY235	Medium (10-60µm)	Natural Mica

Crystal Glass

Colour	Product Code	Particle Size Range	Type
Crystal White	KY9001RS	Medium (10-75µm)	Borosilicate
Crystal White	KY9007RS	Coarse (10-125µm)	Borosilicate
Crystal White	KY9027RS	Coarse (50-300µm)	Borosilicate
Crystal White	KY9035RS	Coarse (45-500µm)	Borosilicate
Crystal Gold	KY9008RS	Coarse (10-125µm)	Borosilicate
Crystal Red	KY9009RS	Coarse (10-125µm)	Borosilicate
Crystal Violet	KY9010RS	Coarse (10-125µm)	Borosilicate
Crystal Blue	KY9011RS	Coarse (10-125µm)	Borosilicate
Crystal Green	KY9012RS	Coarse (10-125µm)	Borosilicate

3D Shift Colours

A range of pigments which change colour depending on angle of illumination and observation.



Colour	Product Code	Particle Size Range	Type
Red-Purple-Blue	KY1030	Fine (15-45µm)	Synthetic Mica
Brown-Purple-Blue	KY1031	Fine (15-45µm)	Synthetic Mica
Gold-White-Red	KY1032	Fine (15-45µm)	Synthetic Mica
Gold-Red-Lilac	KY1035	Fine (15-45µm)	Synthetic Mica
Purple-Blue-Green	KY1044B	Coarse (40-150µm)	Borosilicate
Red-Purple-Blue	KY1050	Coarse (30-100µm)	Borosilicate
Blue-Green-Gold	KY1051	Coarse (30-100µm)	Borosilicate
Gold-Red-Purple	KY1056	Coarse (30-100µm)	Borosilicate
Green-Gold-Red	KY1058	Coarse (30-100µm)	Borosilicate
Green-Violet-Gold	KY2001CO	Medium (10-60µm)	Silicon Dioxide
Orange-Gold-Green	KY2002CO	Medium (10-60µm)	Silicon Dioxide
Green-Blue-Purple	KY2003CO	Medium (10-60µm)	Silicon Dioxide
Gold-Green-Orange	KY2004CO	Medium (10-60µm)	Silicon Dioxide
Violet-Gold-Green	KY2005CO	Medium (10-60µm)	Silicon Dioxide
Blue-Purple-Red	KY2006CO	Medium (10-60µm)	Silicon Dioxide

Argenti Silver

Colour	Product Code	Particle Size Range	Type
Pure Silver	Argenti AU0025	Fine (10-45µm)	Silver Coated Silica
Pure Silver	Argenti AU0060	Coarse (20-100µm)	Silver Coated Silica
Pure Silver	Argenti AU0105	Coarse (30-150µm)	Silver Coated Silica

Disclaimer

These figures are intended as a guide and should not be used in preparing specifications. The information contained herein is to the best of our knowledge true and accurate and any suggestions are made without guarantee, express or implied since the conditions of use are beyond our control. Nothing contained herein shall be construed as a recommendation to infringe on any existing patents covering any material or its use.

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