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PIGMENTS

DESCRIPTION:
A pigment is a coloured powder that gives a colour to a certain carrier such as concrete, plaster, plastic, paint, etc. The finer the pigment is distributed in the carrier, the stronger the colouring power. The finer the pigment is distributed in the support, the stronger the colouring power. Contrary to colourants, pigments are not dissolved but dispersed: the pigment remains in the new mass as a small grain and does not dissolve. This is why a pigment does not dissolve in water.

A pigment is only suitable for a particular medium if it remains stable therein. That is to say, the pigment:

- ✓ must not react with the carrier
- ✓ must not oxidise under the influence of oxygen in the air
- ✓ must not fade under the influence of sunlight (UV).

There are many different pigments that can be classified:

- ✓ by origin: natural or synthetic pigments, or
- ✓ By composition: inorganic (mineral) or organic pigments.

Natural pigments may have an organic origin, but are usually extracted from the earth as a mineral (ochres, umbers, earths, etc.).

The majority of pigments are synthesised from mineral or organic substances. The most important mineral synthetic pigments are oxides of iron, chromium, cobalt, titanium, lead, molybdate, ...

In addition, there is a wide range of organic compounds that are colour-bearing (phtalocyanides, azo pigments, etc.).

EXCLUSIVE TARRAGON PIGMENTS:
The exclusive Dragon pigments are an extensive range of cut pigments or blends. These blends are composed of pigments and fillers, with the possible addition of an additive.

Features:
The properties of these Dragon pigments are determined by the pigments used, their concentration, the fillers used and any additives.

The alkali and acid resistance, the UV resistance and the temperature resistance are the most important parameters to consider when using these pigments. Very specific applications are best done after extensive testing of a product. Inorganic pigments are usually more UV-stable than organic pigments and, therefore, better suited for outdoor use.

Highly concentrated blends are for cement and lime applications, for example, and lowly concentrated blends are for oil paints, fertilisers, etc. An additional advantage of blends is that their specific gravity is higher than that of the pure pigment, so they create less dust and can be metered and mixed better.

- ✓ Dragon pigments based on a high concentration of organic green, blue,... and additive are ideally suited for cement and lime applications, ... Colours: 12411, 15421, 9776, 16308
- ✓ Dragon pigments based on white, black and blue are ideally suited for cement, lime and paint applications, ... Colour: 12390, F6631, titanium dioxide
- ✓ Dragon pigments based on a high concentration of organic yellow, orange, red, blue and green, if alkali-resistant, are suitable for lime products and excellent for paints, plastics, etc. Colours: similar to the organic paint pigments.

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Use
The use of the exclusive Dragon pigments is completely determined by the composition. Products have been developed for the following applications, among others:

- ✓ Cementitious products such as industrial floors, concrete blocks, concrete clinkers, roof tiles, tiles, grouting mortar, terrazzo, ...
- ✓ Lime products such as mineral paints, frescoes, plasters, ornaments, ...
- ✓ Plastics such as plastic, bitumen, asphalt, rubber, resins, quartz flooring, etc.
- ✓ Paints such as oil and water colours, ...
- ✓ Fertilisers
- ✓ Paper, cardboard, ...

NATURAL PIGMENTS:
The range of natural pigments consists of ochres, oxides, earths (sienna) and umbers. These natural pigments are created by weathering various rocks in countries such as France, Italy, Spain, Cyprus, etc. The excavated rocks are washed, dried and ground. The main ingredient and colouring element of natural pigments is iron oxide, supplemented by various other oxides. Depending on the composition, they are called ochres, oxides, earths or umbers. If the earths and umbers are calcined, the colour changes from yellow to reddish brown and we speak of burnt earth and burnt umber. The natural pigments exist in all soft, natural shades from yellow, red and brown to black.

Features:
Due to their excellent UV and weather stability, the natural pigments can be used in almost all indoor and outdoor applications. Due to their alkali-resistance and colour strength, these pigments are excellently suited for lime and cement products.

Natural oxides are acid resistant and can be used in combination with many chemicals. As these natural oxides have a good hiding power they are also frequently used in paint products. The temperature resistance of natural oxides is different for the different colours: yellow, black and brown are resistant up to 177°C, red has a much higher resistance and can be used in the ceramic industry. Natural oxides are good UV absorbers and can protect polymers in plastics and paints against degradation by UV radiation.

Applications:
Cementitious products such as industrial floors, concrete blocks, concrete clinkers, roof tiles, tiles, grouting mortar, terrazzo, ...

- ✓ Lime products such as mineral paints, frescoes, plasters, ornaments, ...
- ✓ Plastics such as plastic, bitumen, rubber, resins, quartz flooring, ...
- ✓ Paints such as oil and water colours, ...
- ✓ Fertilisers
- ✓ Wood treatment products
- ✓ Paper, cardboard, ...

USE OF PIGMENT PER CARRIER:
Cement:
The following pigments can be used for the colouring of industrial floors, concrete blocks, plant pots, bicycle paths, clinkers, roof tiles, tiles, screed, jointing mortar, cement glue, etc:

- ✓ Natural oxides: yellow, red, brown, black
- ✓ Synthetic iron oxides: yellow, red, brown, black
- ✓ Dragon pigments: blue, green, grey
- ✓ Chrome oxide green
- ✓ Cobalt oxide blue

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- ✓ Carbon or soot black (under certain conditions)
- ✓ Titanium dioxide white

Lime:

The following pigments can be used for colouring frescoes, plaster, decorative elements, mineral paints, etc:

- ✓ Natural oxides: yellow, red, brown, black
- ✓ Synthetic iron oxides: yellow, red, brown, black
- ✓ Dragon pigments: red, yellow, blue, green, grey
- ✓ Chrome oxide green
- ✓ Cobalt oxide: green, blue
- ✓ Carbon or soot black (under certain conditions)
- ✓ Ultramarine: blue, violet (under certain conditions)
- ✓ Titanium dioxide white

Plastics:

For colouring plastic, epoxy, polyester, alkyd, quartz floors, roof rubbers, etc. the following pigments can be used:

- ✓ Natural oxides: yellow, red, brown, black
- ✓ Synthetic iron oxides: yellow, red, brown, black
- ✓ Dragon pigments: red, yellow, blue, green, grey
- ✓ Chrome oxide green
- ✓ Cobalt oxide: green, blue
- ✓ Milori or Prussian blue
- ✓ Ultramarine: blue, violet
- ✓ Titanium dioxide white

Fertiliser:

The following pigments can be used for colouring liquid and powdered fertilisers, seeds, etc:

- ✓ Natural oxides: yellow, red, brown, black
- ✓ Bister
- ✓ Synthetic iron oxides: yellow, red, brown, black
- ✓ Dragon pigments: red, yellow, blue, green, grey

Paints:

For colouring oil paints, water-based paints, mineral paints, synthetic paints, etc., the following pigments can be used:

- ✓ Natural oxides: yellow, red, brown, black
- ✓ Synthetic iron oxides: yellow, red, brown, black
- ✓ Dragon pigments: red, yellow, blue, green, grey
- ✓ Chrome oxide green
- ✓ Cobalt oxide: green, blue
- ✓ Ultramarine: blue, violet
- ✓ Milori or Prussian blue
- ✓ Carbon or soot black
- ✓ Titanium dioxide white
- ✓ Zinc white