Discover the world of pigments

Fine Art and Restoration supply

Discover the world of pigments
Since we moved into a flour mill in 1984 we are producing our own electricity with hydropower coming from the river „Altrach“ running right next to our premises.
Ancient formulas for pigments like Vermillion, Smalt, Lapis Lazuli, Bone Black and Madder Lake sank into oblivion for a long period of time but have now been brought back to life for everyone to experience.

Over the course of the industrial revolution and two world wars the traditional craft of paint manufacturing disappeared. The color industry of the 1930s focused on pigments and paints for technical use only and mainly aimed at mass production.

Even today the paint manufacturing industry tries to produce very consistent color shades. These uniform hues highlight the main difference between synthetic pigments and natural pigments. The appearance of minerals changes constantly depending on their various points of origin. Crystals of natural pigments reflect light very strongly which enhances their brilliance significantly. The tradition of hand making paint from pigments and binders is still being practiced all over the world due to these unique features.

„Pigments and colors do not only consist of raw material and formulation. Their history and traditional value also add crucial characteristics“

Dr. Georg Kremer (Founder)
Pigments

Kremer Pigmente offers over 1500 Pigments, of which 250 are produced in our color mill. Raw materials from all over the world are carefully treated and manually rubbed, sieved, scratched and filtered into powder. This is how, for example, 100 grams of precious stone are turned into 4 grams of pure Ultramarine Blue pigment. Striving for the highest quality and purity standards, Kremer Pigmente has become the world leader in the field of historic pigments.

“Our research surrounding old recipes of traditional paint making bring back to light many long-forgotten colors. In addition, we experiment with many different materials such as stones, bones or roots which allows us to create knew, unknown shades and variations of hues”, says David Kremer, managing the company as CEO in the second generation of the family.

Besides the handmade historic pigment range, Kremer Pigmente also distributes modern, synthetic pigments.

Our pigments are categorized as follows:

- KREMER-made and historic Pigments
- Earth Pigments & Iron Oxide Pigments
- Pigments of Modern Age
  (Cadmium Pigments, Organic Pigments, Cobalt Pigments, Ultramarine Pigments, Studio Pigments, Carbonic Blackening, Spinel Pigments)
- Special and Effect Pigments
  (Pearlescent Pigments & Glitter, Mother of Pearl & Glimmer, Metal Powders, Daylight Fluorescent Pigments, Phosphorescent Pigments)
- XSL-Pigments
- Fine Colored Glass Pigments
- Iwa-Enogu® Mineral Pigments from Japan

The production of our own pigments is still carried out by hand. Bulky raw material is crushed down and sorted manually. Only selected pieces are processed into pigments.
Binders for...

Binders provide a bond between the individual pigment particles and allow adhesion to the painting surface. We distinguish between organic and inorganic binders, as well as water-dilutable and solvent-soluble binders.

...watercolor

Watercolor is usually bound with gum arabic since the binder can be easily dissolved with water. It is obtained from a North African acacia species. Most pigments can be processed easily with the gum arabic-based watercolor medium (#79260).

...tempera

The word Tempera comes from the Latin word “temperare,” which means to moderate, manage, or combine. This might allude to the fact that substances are brought together which usually do not mix easily. Mixing aids or emulsifiers enable the use of resins and oils in water-dilutable paint. The technique does not require the use of a solvent and is still waterproof when dry.

...acrylic color

Many acrylic dispersions are suitable binders for pigments. All polymer dispersions are mixtures / emulsions or dispersions of monomers and more or less long polymer chains in water. Kremer Pigmente offers acrylic dispersions and polyurethane dispersions for various applications: Dispersion K 52 (#75075), Primal® AC 35 (#75100), Primal® WS 24 (#75250), Dispersion K 19 Gloss & Matt (#75305, #75355), Dispersion K 9 (#75367), Dispersion K 500 (#75600), Acrylic Dispersion 500 D (#75900), Dispersion K 498 (#76000), Dispersion K 360 (#76101), Polyurethane Dispersion PU 52 (#76805), Polyurethane Dispersion 61 PC (#76806).
Wall paint and color for applications on solid nonporous painting surfaces often need to fulfill certain adhesion requirements. The paint should bond extremely well with the ground and, when possible, improve the building’s physical properties. Suitable binders are:

- Cellulose Glues (e.g., Tylose® MH 300 P2 (#63600) or Klucel® E (#63700))
- Protein-containing glues (e.g., Hide Glue, cubes (#63020))
- Casein (#63200)
- Lime (e.g., Lime (#31800) or Lime Water (#31808))

Oil is the binder of choice for age resistant painting. The stability of the oil color is determined by its homogeneity. This is why the pigment needs to be thoroughly worked into the oil until all pigment particles are fully enveloped and a lump-free, stiff paste is achieved. We distinguish between drying and non-drying oils.

**Linseed oil:** Linseed oil is gained from egg-shaped green or brownish seeds inside the flax fruit. The pure oil is light or dark yellow and turbid and therefore needs to be filtered before use. (eg. Linseed oil swedish (#73020) or linseed oil varnish (#73100)).

**Walnut oil:** Walnut oil is less prone to yellow and dries slightly slower than linseed oil. Used on wood, walnut oil helps to preserve the original color.

**Poppy oil (#73600):** Poppy Oil: The lightest oil of all drying oils. CAUTION! Poppy oil may re-fluidise in lower layers.

**Non-drying oils:**
E.g. Claw oil (#73640) or Jojoba oil (#73675 – liquid wax).

**Essential oils:** E.g. Clove oil (#73700) or lavender oil (#73750). These oils evaporate without leaving residues and do not have any binding power.

**Owatrol oil (#79071):** Due to extremely low surface tension Owatrol Oil spreads easily in all pores of an object. Once hardened it forms a shield against humidity and corrosion. It also serves as a primer for linseed oil based ceiling coats.
Kremer-Made: Ready-made colors

Many of our ready to use colors are still crafted in our company laboratory and production site in Aichstetten. We use pure pigments only and work according to century-old recipes

Kremer watercolors are produced following historic recipes and are all handmade in Germany. The use of a selected group of pure pigments, both modern and historic, as well as natural and traditional binding media, ensures unique luminous quality.

Our inks consist of a rich shellac base with pure lightfast pigments. They dry to a glossy film and, once dry, remain water-insoluble even when heavily diluted.

Color pastes are highly concentrated water based pigment dispersions. Uncut pigments are dispersed in the best possible way to achieve their maximum color intensity. They can be intermixed with other colors as desired. In addition they have a very long shelf life and can even be kept frozen.
Kremer oil colors are manually worked on a small roll mill. This traditional, time-consuming method guarantees the highest quality standards. We offer 250ml & 1 liter tins, as well as tubes.

Kremer wall paints These solvent-free, water-soluble wall paints are produced from natural raw materials and are available in eight different shades. The pigments used are pure natural earths, historical cobalt and carbonic pigments, and result in a silky, matte, high-covering paint.

Kremer retouching colors Kremer Retouching colors are developed especially for restorers. They are available in three different binders: Shellac, Laropal 81 and Paraloid B 72.

» The following ready-made colors are available in addition to the Kremer-made range: Maimeri – matic retouching colors, Golden Acrylics & Gels, Gamblin Conservation Colors, Lutea watercolors, Silicate Chalks, and Urushi Lacquers and Primers.
## Service

Kremer Pigmente offers a broad range of services.

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Special / custom made</strong></td>
<td>We produce custom-made paints and artist colors in nearly any binding medium according to our customers’ needs. Customers also have the ability to commission the treatment of their own raw materials such as rock powder, earths, coarse pigments or precious stones like ruby or emerald. We are equipped with machinery for all kinds of material and are able to mill, grind or sieve upon individual request.</td>
</tr>
<tr>
<td><strong>Special technical advice</strong></td>
<td>Technical inquiries for all applications can be directed to our qualified staff in Aichstetten – either on site or by phone. Our online-shop also provides extensive product information, application advice and Safety Data Sheets. Recipes and a suitability list also help customers put together the appropriate choice of pigments.</td>
</tr>
<tr>
<td><strong>Courses and workshops</strong></td>
<td>Kremer Pigmente offers courses regarding the application and processing of pigments providing a valuable basis for painting and restoring. Our experienced lecturers offer clients a practical approach to various techniques.</td>
</tr>
<tr>
<td><strong>Sales</strong></td>
<td>Kremer owned shops are in Aichstetten, Munich and New York but more than 100 artist &amp; restoration material stores in Germany and around the world offer a range of Kremer Pigmente products. Online orders are shipped worldwide.</td>
</tr>
</tbody>
</table>