

# Kremer Pigmente GmbH & Co. KG

## Kremer Pigmente Watercolor Set Blue

With the Blue Watercolor Set, the pigment specialist is presenting 14 selected shades of blue around the latest pigment discovery, YlnMn-Blue

Blue is by far the most popular color, both with women and men and has been one of the most precious colors for many centuries. Lapis Lazuli is probably the most famous blue from antiquity to modern times. The beauty of this semi-precious stone was already known to the ancient Egyptians, the Romans and Teutons. Indigo had to travel to Europe on long sea routes via India - blue fabrics were an expression of wealth and prosperity. Today blue jeans are worn all over the world and continue their triumphal march. The completely new, bright, pure pigment YInMn blue extends the previously established color ranges due to ist reflection in the infrared range.

An exclusive selection of these very different pigments is presented in the Kremer Pigmente Watercolor Set Blue as a medium for painting with pure color. The 14 watercolors are elaborately handcrafted from historical and modern pigments in the Color-Mill in Aichstetten according to old recipes. Highest quality in the processing of the pure materials guarantee an extraordinary luminosity of the colors. The pigments are bound with the Kremer Pigmente watercolor medium based on gum arabic. This natural tree gum is made from acacia species from North Africa. It can easily be solved with water.

#### The Kremer Pigmente Watercolor Set Blue contains the following pigments:

## Blue Verditer

Blue Verditer is an artificial copper carbonate. Between the 15th and 17th century it was used as a replacement for the more expensive and sometimes difficult to obtain azurite. Blue Verditer has a slightly greener shade than natural azurite and can be applied much more evenly.

#### Azurite

Azurite was first used by the Egyptians in 2500 B.C. Today most Azurites either come from the Tsumeb desert in Namibia, from northern Mexico or from the southern United States. Azurite forms highly transparent, deep blue crystals. The purer and larger the crystals, the deeper and darker the color. If you grind the best quality Azurite very finely, you get a very light, sky-blue powder.

#### Lapis Lazuli

Lapis Lazuli is one of the oldest jewelry and pigment raw stones. Lapis Lazuli was very common in ancient Egypt. In the Middle Ages, Lapis Lazuli was only used for the highest quality pictures due to its extremely high price. The use of Lapis Lazuli for the blue of Virgin Mary's cloak in Romanesque and Gothic art became particularly famous. The most expensive Lapis Lazuli pigment, Fra Angelico Blue, is a deep dark blue, qite hard mineral that comes from a particular site in northern Afghanistan (Sar-e-Sang). Other sites are in Chile, at Lake Baikal, on Buffin Island and in the USA. Due to the high price of the raw stone, the pigment is produced in a variety of color variations.

## Indigo

Indigo is an organic pigment with a blackish blue, somewhat dull color. The plants from which Indigo is obtained can be found in many parts of the world. The eponymous plant, Indigofera tinctoria L., comes from India. Indigo was found as an artist pigment in Roman paintings from the 1st century A.D., in early medieval miniatures and in paintings from all epochs of European painting. The oldest evidence, however, comes from excavations and was dated 3000 B.C.

## Ultramarine Blue

Up until the beginning of the 19th century, ultramarine blue was a luxury product that was obtained from the semi-precious stone Lapis Lazuli. Ultramarine pigments have also been obtained synthetically since 1829: through time-consuming burning of kaolin, quartz, soda, Glauber's salt and sulfur, as well as carbon as a reducing agent. Depending on the duration and temperature of the firing process, different color shades can be achieved. Ultramarine is famous for its characteristic bright blue hue. From a physical point of view, this is the blue that can be found at the extreme short-wave end of the color spectrum. The closer the color approaches the end of the visible spectrum, the darker it appears.

#### Paris Blue

In Berlin around the year 1704, a man named Diesbach discovered how to make a beautiful blue color from iron salts and cattle blood waste. Since then, this pigment has been on the market under various names, such as Paris Blue, Milori Blue, Prussian Blue or Berlin Blue.

#### YInMn-Blue

YInMn-Blue is the youngest of the major new pigment discoveries. The mixed oxide pigment from the very expensive rare earth yttrium (Y), the extremely rare semi-metal indium (In) and manganese (Mn) has a rather complex chemical composition. Up until today this new pigment is only available in small quantities. The bright blue pigment is produced in precisely defined cycles of reactions at very high temperatures and offers a pure hue between ultramarine blue and cobalt blue dark which was previously unavailable in the color circle. Due to its reflection in the infrared range, colors mixed with YInMn-Blue reach completely new color ranges.

#### Zirconium Cerulean Blue

Chemically, Zirconium Cerulean Blue is closely related to Praseodymium Yellow. Both zirconium silicates are colored by chemical elements: praseodymium yellow or vanadium blue. Zirconium Cerulean Blue has a very soft turquoise, slightly broken hue and is quite bright for a blue pigment. The shade of this pigment is very difficult to imitate with conventional pigments.

## Cobalt Blue

The chemical name for classic Cobalt Blue, formerly also called Thénardsblue (named after its inventor), used to be cobalt aluminate. Today Cobalt Blue is considered as cobalt-aluminum mixed oxide. Cobalt Blue is obtained by annealing clay and cobalt phosphate. A variety of tints can be achieved by varying the components, the duration of the firing process and other factors.

The Kremer Pigmente Watercolor Set Blue is available online with order number #881044 or can be purchased in our stores in Munich, Aichstetten and New York.