

Old Holland Classic Oil Colours



Since 1664



ON THE QUALITY AND HISTORY OF TRADITIONAL CONCENTRATED PAINT

PERMANENCY

A good artist is responsible for the permanency of his work. For many centuries the permanence of paint has occupied artists and it still remains an important consideration for artists nowadays. The permanency of a work of art is characterised by the three following elements:

- A. Background (canvas, paper, etc.)
- B. Binder
- C. Pigment

Weak binding agents have caused the loss of many valuable paintings even though these were painted with highly reliable pigments. Permanency can only be guaranteed by having a thorough knowledge of the individual materials used, combined with a complete understanding of the combinations of these materials.

GRINDING

All pigments are pulverised. First the pigments are ground to powder and then mixed with a binder, by which means a paste-like substance is obtained.

The quantity of oil which is required to make a paste-like paint varies according to each pigment. The amount of binder depends on the size of the powdered particles in the pigment used.

CHARACTERISTICS OF OIL PAINT

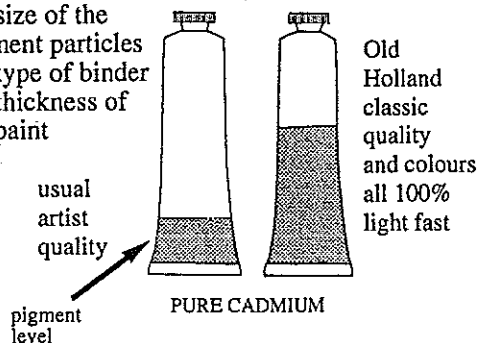
A good paint has to have the following qualities:

1. Covering power
2. Strength of colour
3. Complete lightfastness
4. Maximum colour intensity
5. Mixability with other colours excl. leadwhite

1. Covering power refers to the ability of a paint to cover the canvas completely when the paint is dry. The term is defined by three facts:

- the size of the pigment particles
- the type of binder
- the thickness of the paint

COLOUR INTENSITY LINE



2. Strength of colour can be tested simply by mixing the pure colour with titanium white pigment. The paint which remains the brightest after mixing has the greatest strength of colour. Always use the same brand of white to test different types of paint this way. Strength of colour should not be confused with covering power.

Strength of colour and covering power have one thing in common: they compensate for each other. The finer a pigment is ground, the more completely and regularly light is reflected, which results in a paint which has a better covering power and also a better intensity of colour. It was for these reasons that the Old Masters ground their pigments with great care.

3. Complete lightfastness of the pigment used in making the colour guarantees that the colour will keep its intensity unchanged.

4. Colour intensity is defined in the first place by the choice of pigment and secondly by the quantity of the filler added to the pigment, and thirdly by the ratio of pigment to oil or binder. Most oilpaints today contain excess oil or gel (LINSEED OIL BUTTER) and are under pigmented.

The binder is also an important factor. Acrylic paint and alkyd paint need large amounts of binders and fillers, and as result the intensity of colour suffers (think of pastel hues). The reason for using so much binder and filler in acrylic and alkyd paint is the fact that without these additives the liquid in these products tends to become rubbery within the tube. This does not happen with oil colours.

5. The use of pigments which have proved to be not mixable should be avoided, as chemical reactions in some paints cause them to become darker and blacker in time. Pigments such as the lead chromes, turn from lemon yellow to dark red, when mixed with pigments containing sulphur. Old Holland doesn't use those pigments.

HISTORY

It was during the 15th century that the Dutch first developed oil colours by mixing pigments with linseed oil, and in this way oil paint was developed. The reason for this experiment was the need for a

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kind of paint which was more flexibel than egg tempera. In the studios of the Old Masters, pigments and oils were ground together using a muller on a marble porphyry table until a smooth and creamy paint was acquired. This consistency can only be obtained by moving the muller in a figure of eight motion. Linseed oil was frequently chosen, the oil being obtained by roughly grinding the seeds of the flax plant in a windmill, just like grinding corn. Afterwards the cold pressed oil filtered, and finally the end product was bleached in the sun. As well as linseed oil, other oils were also used to control the drying process and the flexibility of the paint.

The made-up paint was stored in a pigs bladder, which was sealed and tied with a piece of string. A nail was then used to pierce a hole for extracting the paint, and the hole afterwards was sealed with the nail.

During the last century the marble porphyry table was replaced by a machine with three rollers also made of porphyry. Nowadays mechanical grinding has become a necessity. A good artist needs a whole working day to grind 1 kilogram of madder lake.

Nowadays rollers made of hard steel are used by other companies, which is fundamentally incorrect. Together with other factors, they cause colour changes in the paint, particularly in the earth colours and the cadmiums.

THE FOUNDATION OF THE OLD HOLLAND OIL COLOUR ASSOCIATION

In 1664 there were communal studios where artists mixed their paints properly. This is how the Old Holland Oil Colour Association began. The factory used to be in Scheveningen, therefore the paint is sometimes called Scheveningse oil paint. Now it is situated in the city of Driebergen at Nijendal 36, 3972 KC Driebergen, Holland. In this factory, right up to the present day, the paint is ground with stone rollers entirely according to the techniques of the Old Masters and under the supervision of artists.

Only concentrated lightfast pigments which can be mixed with each other are used, therefore it is not necessary to grade the lightfastness. As opposed to the frequently used raw oils our pigments are only ground with pure cold pressed, sun-bleached, virgin linseed oil, made in the WINDMILL. Only the first cold pressing of the oil contains the maximum acids which have a very good oxidising, and polymerising effect on the painting, which as a result becomes as hard and durable as the paintings of the Old Dutch Masters. Cold pressed

oil of the second pressing or hot pressed oil does not contain enough of the necessary acids. Poppy-oil yellows less but contains fewer acids and will crack more as time passes. After using first pressing, cold pressed, sunbleached linseed oil, the colour deepens slightly when dry, becoming deeper and warmer of hue. When painting skies this becomes even more apparent. As little oil as possible is used when making the colour, because too 'fat' an oil paint will wrinkle. It is a good idea to paint as thinly as possible, using refined turpentine or white spirit as a thinner.

The above mentioned facts distinguish the paints of the Old Holland Oil Colour Association from any other paint in the world whether manufactured in small or large factories anywhere.

THE FAKING OF COLOUR

Faking or substituting colours for the traditional ones is a rather common phenomenon nowadays. Diluting paint is mainly a matter of money. The following figures will clarify the sums of money involved. One kilogram of cobalt violet deep pigment costs approximately US\$ 630: the same amount of pure cerulean blue pigment costs approximately US\$ 420. The price, however, of the commonly used fillers such as barium sulphate, chalk and aluminium hydrate are on the other hand, only US\$ 0.75 per kilogram or thereabouts. By the addition of these fillers, the costs of paint can be radically reduced and moreover this paint needs driers, which usually make oil paintings wrinkle where they have been thickly painted.



pigment

+



linseed oil

=



oilcolour



pigment

+

=



oilcolour

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Another way of bringing the cost down is by mixing a gelpowder and wax into the oil to obtain a paste, with the consistency of VASELINE, that can be used with less pigment.

The Old Holland Oil Colour Association guarantees that no fillers whatsoever are added to their traditional classic pigments.

A simple example can explain much: one tube of manganese blue or one tube of cadmium red deep (tube size no. 9, contents 40 ml) of Old Holland classic oil paint weighs between 130 and 135 grammes. Other brands of manganese blue and cadmium red deep paint have been weighed approximately 100 grammes and sometimes much less.

The reason for the difference in weight is that in Old Holland paint there is no cheap filler as a replacement for the heavy and expensive barium manganese and cadmium pigments. These differences have visible consequences. If, for instance, an artist is used to getting a certain colour by mixing 50 % manganese blue and 50 % white, he will only need 20 to 25 % Old Holland manganese blue mixed with economic white to obtain the same colour results. The artist will soon notice that the colours of Old Holland are noticeable stronger than with many other brands of paint.

PACKING

In the last century the pig bladder was replaced by the tube. The result of the absence of fillers is that each tube has to be filled by hand, as mechanical filling of this paint in tubes has proved so far to be a technical impossibility, owing to the stiffness of the paint mixture which will not pass through the automatic machinery.

Another noticeable difference is in the indication of the colour in the tubes. After a batch of paint is finished, a certain amount is painted out on sheets of prepared paper. After the paint is dry, the sheets are cut into small pieces and glued around the lead tube. In this way each tube has its own 'genuine' colour chart which precludes the likelihood of colour change occurring in the studio under the influence of sunlight, unlike printer's ink, which has the tendency of bleaching in the sun. Old Holland is the only paint factory in the world which packs and identifies paint in this way.

RESTORATION

The reliability of the traditional recipes has been proved. One only has to look at the paintings of the Dutch Masters such as Van Ruysdael, Van Gogh, Vermeer and Mondriaan etc. to see the durability of the correct methods. Craftsmanship and the

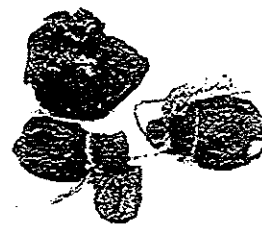
traditional ways of working have always been a priority at the Old Holland Oil Colour Association and so Old Holland is rightly proud to be the only place in the world to use these techniques in the way we do. For these reasons Old Holland paint is often used for restoration in important museums all over the world, from Moscow and Amsterdam, to New York and Paris and others. One example is the large quantity of lapis lazuli used for the restoration of the Wat - Suthat temple in Bangkok in Thailand. Old Holland paints are exported to more than 56 different countries. At the Rijksacademy in Amsterdam students will use this paint, while Queen Wilhelmina and Queen Juliana were both given art lessons by a master of the name Albert Roelofs, who only used Old Holland paint.



the old dutch master



the grinder



the pigbladders

At the factory in Driebergen is a space set up as a museum. There are all sorts of traditional pigments, resins, machines and tools to be seen as well as the original palettes of famous old masters. It is clear that the materials are treated with great respect.

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CONCLUSION

- * The Old Holland Oil Colour Association was established in 1664 and is still continuing their tradition of more than 300 years; the oldest artist's paint factory in the world.
- * The oil paints of Old Holland are still manufactured according to the 16th century methods and under the supervision of artists.
- * The Dutch Masters such as Van Ruysdael, Van Gogh, Vermeer, Mondriaan, etc. used Old Holland paint.
- * All 168 colours of the Old Holland Oil Colour Association range are completely lightfast, but a well known fact is that the madder lakes and cremnitz white are nearly lightfast.
- * All 168 colours are manufactured using stone rollers which don't change the colour of the paint. Stone rollers cannot be cooled down if they turn too fast, and therefore to avoid burning the paint in manufacturing, the rollers have to turn very slowly. This of course, is a time consuming and costly process which results in pure and unchanged colours. Metal rollers, on the other hand, can be cooled down from within and can therefore be turned much faster and make more paint in less time. However, metal actually changes the colours of concentrated pigments, especially the light earth colours and cadmiums. The colours oxidize and become browner when in contact with the metal, and even after using the paint from the tube this process continues. So despite the cost and time saved, the process is not satisfactory, and stone rollers are much to be preferred.
- * Only the purest virgin cold-pressed sunbleached linseed oil of the first pressing made in the WINDMILL is ever used in Old Holland paints.
- * In the classic colours of Old Holland no fillers such as cheap chalk, barium sulphate, aluminium hydrate powders or wax are used.
- * The resulting benefits to the artist using the classic colours are:
 - a. Greater covering power
 - b. Strength of colour
 - c. The superb intensity of classic colour
- * The classic colours of Old Holland are less transparent because they don't contain transparent fillers which are usually used to produce cheap paint quickly, which detracts from the quality.
- * Classic handmade traditional oilpaint without fillers is obviously heavier in weight than the industrially manufactured paint with fillers. However, the quality cannot be compared with the products containing fillers, which have the consistency of VASELINE.
- * Each tube is its own colour chart, because of the handpainted strip on the outside of the tube. Sunlight bleaches printed labels, but the lightfast paint on the Old Holland labels remains unchanged, even in direct sunlight.
- * Since this paint consists of pure pigments and oil as opposed to industrially manufactured paints, it cannot therefore be filled mechanically in tubes because the paint is too sticky. So the filling of the tubes at the Old Holland Oil Colours Association is done by hand; tube by tube.
- * The Old Holland paint is a little more expensive than other brands, but considerably cheaper to use in the long run because the traditional paint consists of the highest possible pigment concentration, and will, of course, go much further.
- * The products of the Old Holland Oil Colour Association are used all over the world for restoration purposes in Moscow, Amsterdam, New York, Paris and exported to more than 56 countries.
- * Queen Wilhelmina and Queen Juliana both used the classic paints from the Old Holland range.
- * The Rijksacademy in Amsterdam teaches with Old Holland classic colours.
- * The workshop of the Old Holland Oil Colour Association Since 1664 is now a museum of paint. The no longer used tools, which are over 300 years old, together with antique pigments and resins, are shown in a separately designed space.

You are cordially invited to visit our museum by making an appointment at: Nijendal 36, 3972 KC Driebergen, Holland.
- * Finally a word of caution. Some artists have complained that the Old Holland classic colours are too strong in colour mixing. We suggest that they first begin with the economic white paint and then mix it with a little of the classic Old Holland paint since 1664.
- * *The word lake is used if a colour is transparent (glazing techniques).*
- * *The word extra is used if a traditinal not lightfast pigment is replaced by a to-days lightfast pigment.*