

MIXOL®

USA

Multi-purpose tinting paste

MIXOL® Oxide Tints: WHEN and WHY are they used?

- ▶ In all silicate paints and coatings!
- ▶ In all mineral building materials!
- ▶ In all silicone resin paints and coatings!
- ▶ In all varnishes low in or free from aromatic compounds!
- ▶ In insulating varnishes, sealers as well as in exterior paints containing solvents.

The increased demand for high quality and fast drying of varnishes, paints and other coatings, has also called for extremely high standards to be met by tinting systems such as MIXOL®.

With our MIXOL® Oxide Tints our product range offers a number of inorganic pigments of outstanding quality and fastness that meet even the highest demands!

What are the advantages of MIXOL® Oxide Tints?

All MIXOL® Oxide Tints are inorganic mineral pigments, being the oxides of various metals. Thus they are light fast, weather proof and won't change their color for years or show any fading. These conditions are all essential for outdoor applications.

● **MIXOL® Oxide Tints in silicate paints and other mineral building materials**

When tinting silicate paints which are commonly used for outdoor application MIXOL® Oxide Tints have always been referred to. And indeed – this is an excellent usage for MIXOL® Oxide Types or any mixtures of these.

Problems arising during the tinting of silicate paints are due to their extremely high alkalinity in the **wet** state. MIXOL® tinting pastes which are **not** of the “oxide types” may cause problems in silicate paints.

There are several reasons for such problems.

In contrast to varnishes and dispersions, silicate paints do not produce a **closed** film. The stability of silicate coatings is due to their “silicification”. This means the coat of paint remains “open-cell”, “breathable” or “water vapor permeable”. However, it also means that the pigments included in the coating are very much exposed to any aggressive environmental conditions like light and weather. Only selected high-quality pigments like the MIXOL® Oxide Tints are resistant to this environmental load.

Moreover depending on the quantity added, the wetting agents necessary in the standard (organic) MIXOL® types may seriously disturb the “silicification” of the silicate paints. Water-spotting and washed out pigments at the surface might be possible consequences!

In MIXOL® Oxide Tints different wetting agents are used which do not affect the “silicification” or the quality of this coating!

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When tinting other mineral building materials such as lime, concrete, cement etc., alkali resistant pigments are essential. Because of their alkali stability MIXOL® Oxide Tints are the best choice for tinting of these materials (with the exception of No. 30 Oxide-Brilliant Yellow which, when used in high alkalinity materials, nevertheless shows strong light fastness and weather resistance!). The maximum addition of 3–5% of MIXOL® products should not be exceeded. We recommend using a masterbatch by tinting a smaller amount of material and then stirring this into the total compound to be tinted.

● **MIXOL® Oxide Tints in silicone resin paints**

Silicone resin paints have a high water vapor permeability! In this respect they are almost as good as silicate paints but without having their disadvantageous high water absorption and their high alkalinity. However, they do have a comparable porosity.

As silicone resin paints are usually applied over mineral grounds which have not been sealed with an appropriate primer in order to keep them water vapor permeable, the alkalinity of the ground may adversely affect the pigment.

Therefore, only MIXOL® Oxide Tints (inorganic pigments) can be recommended without restriction for silicone resin paints!

● **MIXOL® Oxide Tints in insulating varnishes and sealers**

Polymer resin based insulating varnishes and sealers containing solvents can only be tinted by MIXOL® Oxide Tints. A maximum addition of 5% should not be exceeded.

Cationic aqueous insulating varnishes and sealers can largely be tinted with a MIXOL® Oxide Tint addition of up to 1% (approx.), or even up to 5% (approx.) using MIXOL® Oxide Brilliant Tints Nos. 29–32. We recommend testing the compatibility of MIXOL® Oxide Tints with the material used before starting the tinting process.

After tinting the material should be immediately processed as, due to the particular ion technology of insulating varnishes and sealers, a chemical action may occur which can result in immediate or delayed thickening of the material.

● **MIXOL® Oxide Tints in varnishes low in or free from aromatic compounds**

Another advantage of the MIXOL® Oxide Tints is that they can normally be used without any problems in varnishes which are low in, or free from aromatic compounds or in other paints that occasionally cause tinting problems (see section of “insulating varnishes and sealers”).

Please note:

In silicate paints and other mineral building materials, in silicone resin coatings, in varnishes which are low in or free from aromatic compounds and in insulating varnishes, sealers as well as in exterior paints containing solvents

use MIXOL® Oxide Tints only!