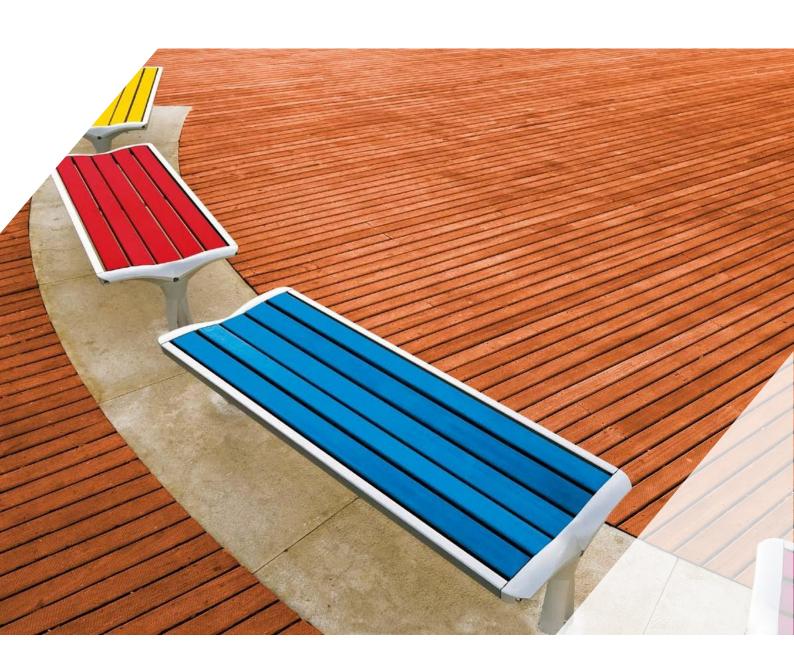


Dispersions for wood

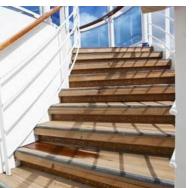


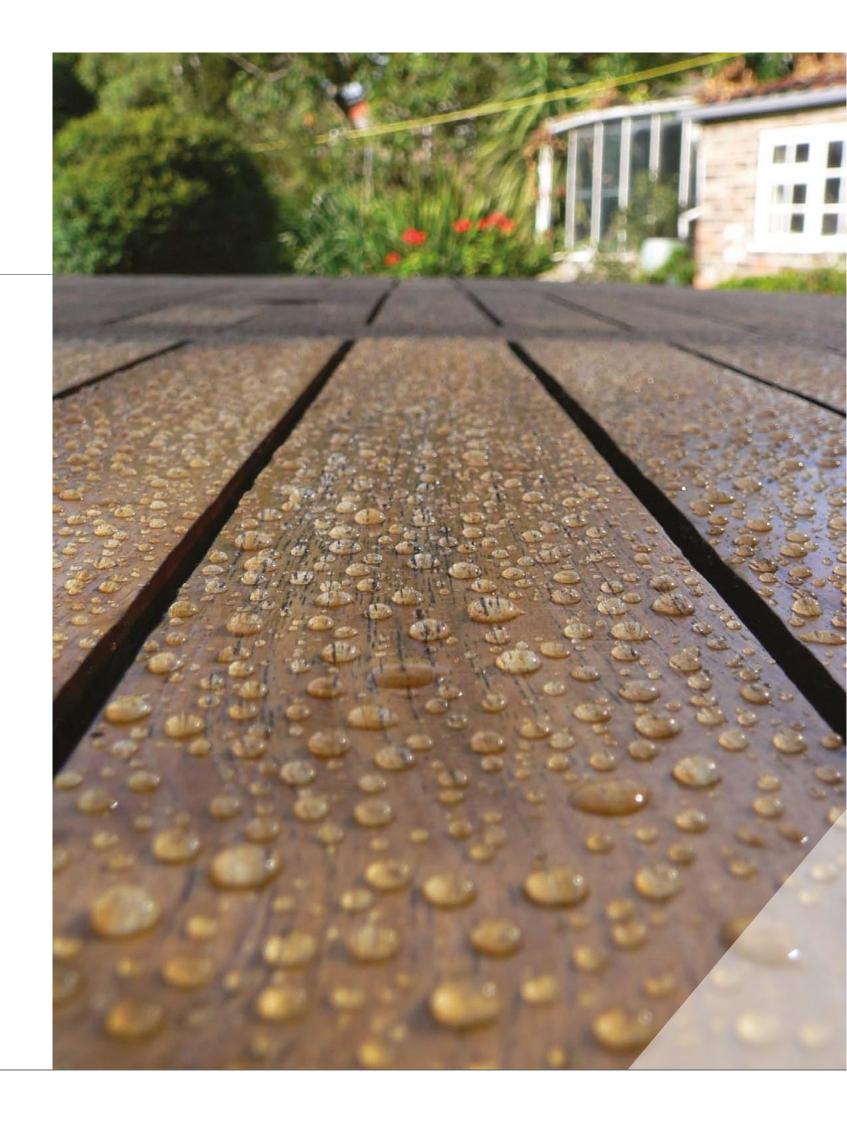
Dispersions for wood

We are a producer of pigment dispersions that can enhance the color, aesthetic appearance and protection of wood substrates and laminates, widely used for interior and exterior applications. Many coatings producers see operational and cost benefits in avoiding the inconvenience of the in-house dispersion of specialist colors like transparent, opaque and natural iron oxides.

Furthermore, we have the ability to manufacture pigments that suit tailor-made dispersion formulations, optimized for color, strength, concentration, stability and shelf-life. We have developed a commanding position in the wood coatings industry over many years. We work collaboratively with coatings producers, offering both system-specific pigments and dispersions that can be readily combined with existing colorant systems without adverse effect. Manufactured at specialist production and service centres in the UK and on mainland Europe, we export pre-dispersed pastes to over 40 countries.







Dispersion ranges

We have established a global presence with our well-known dispersion brands, DISPERFIN® and ADDIPAST® dispersions and TIMBASOL® dispersions. DISPERFIN® and TIMBASOL® dispersions offer similar color ranges, however, are formulated with different dispersion technology.

Dispersions for solvent based systems

Our aromatic based TIMBASOL® SL and DISPERFIN® LH (450) dispersions are designed for use in solvent systems, whilst our aromatic free TIMBASOL® AF and DISPERFIN® LH (553/554) dispersions are recommended where regulatory demand pushes for reduced aromatics and low odor. DISPERFIN® LH (653) dispersions can be used in preference to white spirit based formulations in colder climates to help prevent freezing.

Dispersions for water based systems

The multi-compatible TIMBASOL® WF dispersion series is a VOC, resin and APE free system designed for use in water based systems. Other water based systems include the resin-containing TIMBASOL® WA and DISPERFIN® WD dispersion ranges, ideal for highly durable, film-forming coatings.

ADDIPAST® dispersions

To complement the DISPERFIN® LH and DISPERFIN® WD dispersion ranges we also offer a range of carbon black dispersions of varying pigment concentrations.









Comprehensive pigment dispersions

Our colored TIMBASOL® organic and inorganic pigment dispersions and ADDIPAST® carbon black dispersions provide a comprehensive color range for wood coatings with various tones and pigment strengths. We can also tailor make the tone to meet our customer's requirements.

With a well-established global network of pigment sourcing options, we have developed a broad range of cost-effective organic pigment dispersions. Originally formulated to complement the transparent iron oxide pigment dispersions but now finding extensive use in the decorative coatings markets for a wide variety of tinting applications.

Natural earth pigments are offered pre-dispersed and quality controlled which means that they maintain their natural tones whilst limiting undesirable extreme color variance and inhomogeneity. Their semi-transparent properties make them ideal for artist colors and give a natural but cost-effective finish to wood stains, as well as protecting the wood by absorbing harmful UV rays.

A wide range of carbon black dispersions is available at a variety of pigment loadings to provide formulation flexibility, finding significant use for tinting/shading in natural wood applications and decorative coatings. UV absorbers - titanium dioxide dispersions

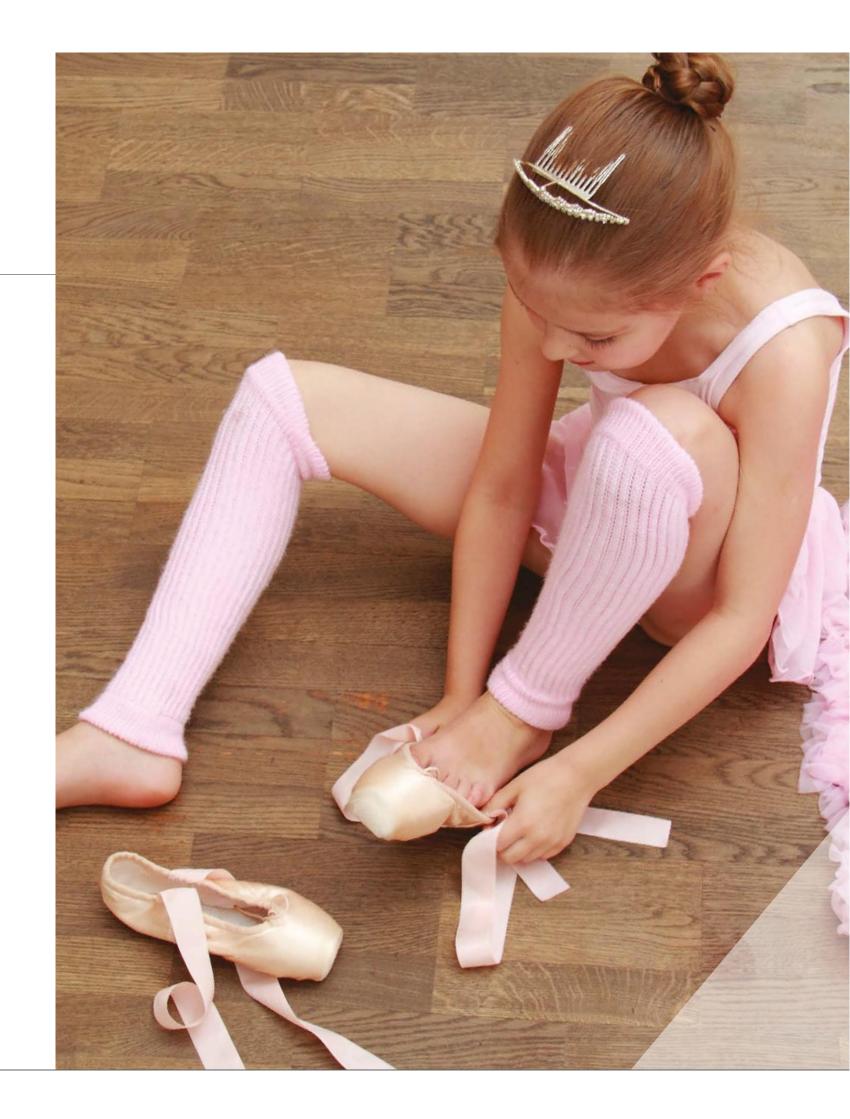
Until now only darker wood shades have provided sufficient UV-protection for exterior wooden surfaces.

Due to their low pigment content, and inherently inadequate UV-protection, lighter wood shades were for interior use only. Formulating with Oxerra inorganic UV absorbers alone or in combination with other Oxerra dispersions, these light wood shades can now be used outside as well, providing the same UV-shield as significantly darker wood shades.

TIMBASOL® UV absorbers are highly recommended for exterior wood coatings where high durability is required.

They are dispersions of ultrafine titanium dioxide pigment used at low loading, ~1.2% by weight, to impart protection from ultra-violet light.

They are dispersed to give optimum particle size distribution and maximum surface area to impart excellent UV resistance.



Dispersions for wood range



Wood shades

A full range of natural wood tones are achieved by blending TIMBASOL® or DISPERFIN® transparent iron oxide and carbon black dispersions.

Transparent iron oxide pigment dispersions are strong absorbers of UV radiation. They boost the UV protection properties in the final stain without changing the color or transparency and enhance the appearance of the natural wood grain.

Additional shades can be achieved using complementary organic and inorganic pigment dispersions as tinters or by allowing us to customize your color.

Solvent and water based ranges available.



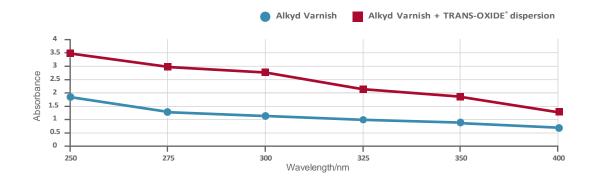
UV protection

One of the benefits that transparent iron oxide dispersions offer is a long-lasting protection from wood degradation caused by UV light.

If left unprotected, the ultraviolet radiation from sunlight at 280-400nm will lead to decomposition of the lignin in wood and will destroy the wood cell structure. The use of TIMBASOL® and DISPERFIN® transparent iron oxide dispersions will allow UV light to be absorbed and the appearance of natural wood grains will be enhanced after outdoor exposure.

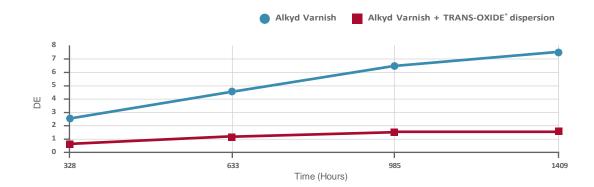
UV absorption properties of transparent iron oxide

Transparent iron oxide pigments are strong absorbers of ultraviolet radiation, which can be damaging to resin systems and wood substrates. Even low levels of transparent iron oxide provide protection from ultraviolet light degradation.



Weathering performance of transparent iron oxide

The use of transparent iron oxide in wood coatings gives the system improved protection against the degradation caused by UV radiation as shown below.





Product compliance and technical support

Safety

We are committed to continuously improving safety performance in our business and across the wider pigments and additives industry. In all aspects of our operations, we actively promote a strong environmental, health and safety culture. This requires a high level of employee engagement and empowerment. It's also an ethos that extends to our work with suppliers and customers.

Environment

Environmental stewardship is one of Oxerra's guiding principles. Harnessing state-of-the-art, innovative technologies, and deploying the skills sets of our pigments and additives professionals, we strive to ensure that our work has minimal environmental impact. Worldwide our production facilities are certified to international Health, Safety, Environmental and Quality standards.

DISPERFIN®, TIMBASOL® and ADDIPAST® dispersions are available in water based systems, in order to meet the increasing environmental pressures on this market.

These water based dispersions are formulated to offer environmental compliance without sacrificing performance.

Regulatory

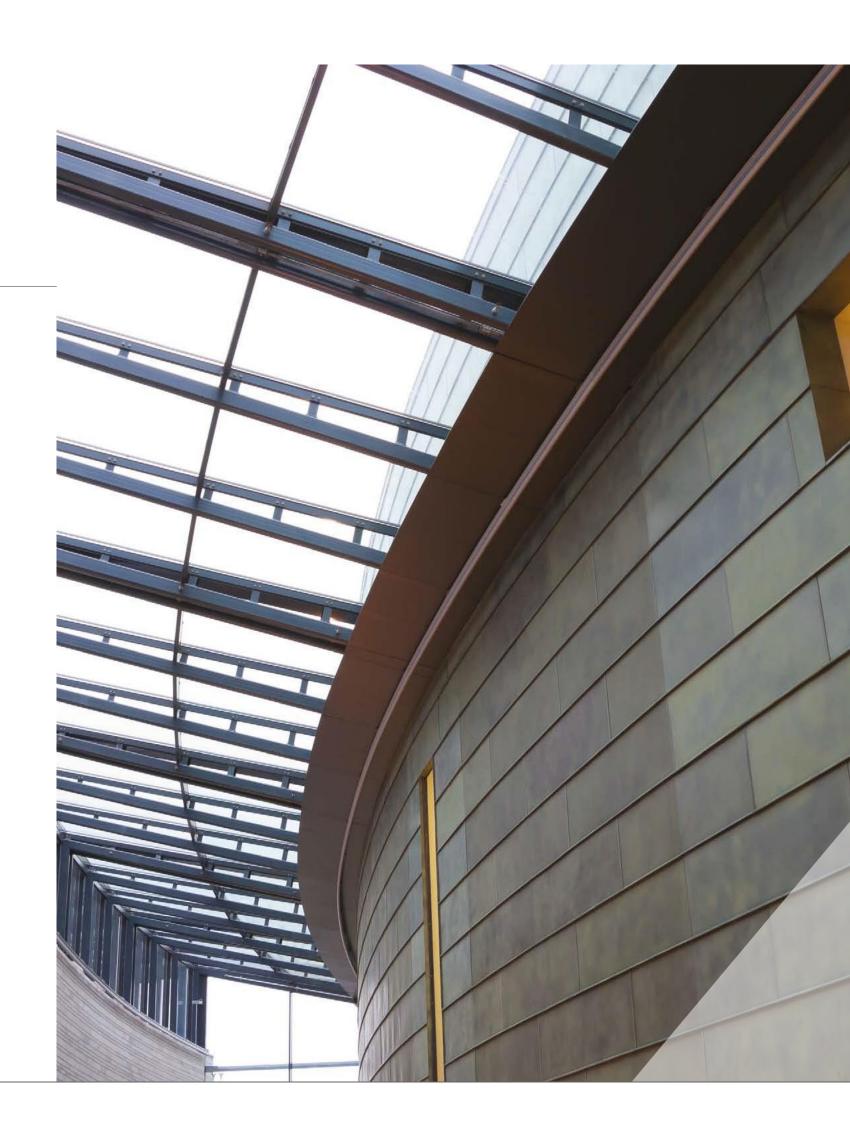
Classification under CLP regulations EU1272/2008 is dependent on the product range. The dispersions are not classified as "Special Waste". As these dispersions cover a wide range of chemistries, please contact your local representative regarding regulatory compliance issues.

Technical support

At Oxerra, quality and value are a given. Whatever your color formulation or handling challenge, we are ideally placed to help you overcome it. Working from our technical service laboratories our experienced chemists and technicians are on hand to:

- ▶ Provide on-going technical support
- ► Formulate industry and customized colors
- ▶ Match new shades
- ▶ Explore new formulation
- ▶ Product compliance and technical support

Recommended application areas are based on the regulatory guidelines listed above; please refer to local regulatory requirements. We believe the information presented is accurate however to check whether this is the latest guidance please contact Oxerra representative.





Contact Details