

Duomeen® TDO

Wetting and dispersing agent for solvent borne paints, inks and coatings

For wetting and dispersing

Duomeen TDO, an additive with well documented performance used globally by paint and ink formulators. This product is solely based on raw materials that have a renewable origin, thereby making it a sustainable alternative.

The primary function is to provide pigment and substrate wetting, providing for good and quick dispersion of the pigment and improved paint adherence to various substrates.

Key benefits

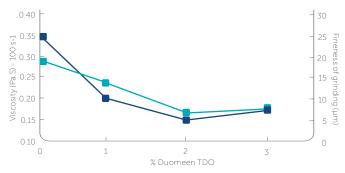
Duomeen TDO exhibit very strong adsorption to most surfaces. Apart from the good dispersion resulting from this, the product also exhibit further benefits:

- Good pigment dispersion
- Improved adhesion even to rusty or wet surfaces
- Improved corrosion protection
- Improved QUV resistance and early water resistance
- No adverse effects on drying time or hardness properties of the paint film

Duomeen TDO will disperse pigments efficiently, and keep the dispersion stable, thereby avoiding flocculation, floating, flooding and other effects associated with poor pigment dispersion, for instance poor colour strength.

This product also has good emulsifying properties, and is thereby able to effectively create stable emulsions of water in for instance alkyd resins and printing ink varnishes.

Dispersant demand curve



Dispersant demand curve at 40% pigment (Bayferrox™ 130) load in alkyd resin

Applications

A product suitable for formulating solvent borne paints, coatings and inks. In particular it is useful in primer formulation. The binder compatible could be for instance a varnish, an alkyd or an epoxy resin. Also in low polar systems the Duomeen TDO works well.

The primary function is as a dispersant. In particular it is good for very hydrophilic, often inorganic, pigments, including:

- Titanium Dioxide
- Carbon Black
- Iron oxide Red and Black
- Calcium Carbonate

QUV resistance



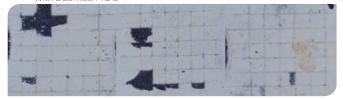
Appearance of primer after 300 hours of QUV ageing. Paints containing Duomeen TDO, display less degradation and whitening.

2021

Corrosion protection

Appearance of primer after 300 hours of QUV ageing, with and without Duomeen TDO. Addition level of Duomeen TDO in below example is 0.3%.

With Duomeen TDO



Without Duomeen TDO



Steel with mil scale and corrosion products, after 6 Volvo ageing cycles (6 weeks). Tested according to ASTM D3359.

Product data

Appearance, 20°C	brown paste
Density, 65°C	865 kg/m³
Flash point	≥ 150°C
Melting point	30-40°C
Viscosity, mPa.s at 60°C	80

Contact us directly for detailed product information and sample request. website | nouryon.com email | paintsandcoatings@nouryon.com

Nouryon

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