

Tioxide TR92 is a multi-purpose rutile titanium dioxide pigment designed to give optimum properties over the widest possible range of applications in many industries. It wets and disperses readily in a very wide range of both aqueous and non-aqueous paint media and gives very good colour and brightness together with high opacity and durability.

PRINCIPAL APPLICATIONS	OUTSTANDING PROPERTIES
Solvent based gloss paints	Dispersion, whiteness, opacity, durability
Alkyd matt paints, primers and undercoats	Colour, opacity, dispersion
Emulsion paints (matt, textured and semi-gloss)	Dispersibility, optimum gloss, whiteness, opacity Chalk resistance and tint retention in exterior pastel colours
Metal decorative and appliance enamels	Opacity, dispersion, whiteness
Automotive finishes and refinishes	Gloss, opacity, durability
Coil coatings	Dispersion, gloss, durability
Powder coatings	Colour, opacity, durability

Huntsman Tioxide does not recommend any of its titanium dioxide pigments for use in lead-stabilised, rigid PVC formulations.

A GUIDE TO

Tioxide TR92

This leaflet is a general guide to the properties of Tioxide TR92 and its potential applications. More detailed information on Tioxide TR92 is available from Technical Service personnel within Huntsman Tioxide.

Although all information is given in good faith, we do not guarantee the accuracy or completeness of information, or that Tioxide TR92 will be suitable for your particular purposes. Samples are available on request.

You should ensure that any process you use or product you make using Tioxide pigment does not infringe any patent.

Contacts

Europe, Russia, Middle East,

North Africa, South and Central America:

europa_support_centre@huntsman.com

USA, Canada, Mexico, Puerto Rico:

americas_support_centre@huntsman.com

Asia Pacific:

asia_pacific_support_centre@huntsman.com

Southern Africa:

south_africa_support_centre@huntsman.com

Huntsman Tioxide

Group Technical Service
Haverton Hill Road, Billingham
TS23 1PS, England

Telephone : +44 (0)1642 376658

Fax : +44 (0)1642 376777

www.huntsman.com/tioxide

Tioxide is a registered trade mark

It is Huntsman Tioxide policy to update this information regularly. You are therefore advised to check that this leaflet is the most up-to-date.

June 2005

TR92 - GB / Version 8

A GUIDE TO

Tioxide TR92

ADDITIONAL APPLICATIONS	IMPORTANT PROPERTIES
Chemical resistant coatings	Dispersion, opacity, durability
Radiation cured coatings	Gloss, hardness development, opacity
High solids coatings	Dispersion, whiteness, opacity, gloss, durability Rapid cure rate in acid catalysed systems
Electrodeposition in paints and primers	Gloss, durability, whiteness
Water based industrial paints	Colour, opacity, dispersion, durability
Wood finishes	Colour, opacity. Stable viscosity in acidic media
Vinyl solution lacquers	Gloss, opacity. Stability in acid modified vinyls
Opaque wood stains	Weather resistance, colour, dispersibility
Printing inks	Opacity, weather resistance
Leather finishes	Dispersibility, gloss, colour, durability
Paper and paper coatings	Opacity. Ease of dispersion. Colour and brightness in speciality papers

PROPERTIES

This table indicates the typical properties of this grade. It is not a specification, although specifications are available.

TiO ₂	94.0%
Inorganic coating	Alumina, zirconia
Organic treatment	Present
Crystal size	0.24 µm
Specific gravity	4.05
Loss at 105°C ⁽¹⁾	0.6%
Bulk density (tamped) ⁽²⁾	1.2g/cm ³
Oil absorption ⁽³⁾	18
Water demand ⁽⁴⁾	28
Durability	Highly durable
ISO 591 classification	R2
ASTM D476 designation	II, III, IV

SAFETY, HEALTH AND ENVIRONMENT

As for all fine powders, the handling of Tioxide TR92 pigment can give rise to airborne dust. Good industrial hygiene practice should be observed so as to avoid the generation and subsequent inhalation of dust. For more information refer to our material safety data sheet.

FOOD CONTACT

The subject is too wide to be adequately covered in a technical data sheet and customers should seek confirmation of compliance for each of the particular regulations they are interested in by contacting Huntsman Tioxide Group Technical Service or the local sales forces.

STORAGE AND SHELF LIFE

The pigment should not be stored in outside areas exposed to the weather. All direct contact with moisture should be avoided. By storing the pigment correctly, its properties should not deteriorate with time. However to ensure optimum performance, it is recommended that the product is used on a first in, first out basis from receipt of shipment.

⁽¹⁾ Measured within 48 hours of production

⁽²⁾ Based on ISO 787/11

⁽³⁾ Palette knife method, ISO 787/5

⁽⁴⁾ In the presence of 0.4% sodium salt of complex polyphosphate calculated on the mass of pigment