

DESCRIPTION Tyzor® OGT, a 100% active, reactive organic alkoxy titanate, is a colorless-to-yellowish organic liquid that is sensitive to moisture. Although a highly reactive titanate, Tyzor® OGT is less sensitive to moisture than Tyzor® TPT and Tyzor® TnBT.

Tyzor® OGT acts as a Lewis acid catalyst in processes such as esterification, transesterification, condensation and addition. It also can be used to promote adhesion and cross-linking of polymers, or to form polymeric titanium dioxide layers used as binders or coatings.

APPLICATIONS

REACTION CATALYSTS

Tyzor® OGT is used as a catalyst for esterification, transesterification, condensation and addition reactions. Typical reaction products include (meth)acrylic esters, polyester, plasticizer, various esters and polyurethanes. Benefits include elimination of by-products, increased yield, easy work-up, low catalyst concentration and low toxicity.

COATINGS

Glass, metals, fillers and pigments can be treated with Tyzor® OGT to increase surface hardness, promote adhesion, improve resistance to heat, chemicals, corrosion and scratches, add iridescence or enhance light reflection.

PAINT AND SEALANT ADDITIVES

Tyzor® OGT is useful as a binder and also can be used as an adhesion promoter or cross-linker for –OH or –COOH functional polymers and other binders in paints and sealants.

HOW TO USE

Tyzor® OGT is typically formulated with the other ingredients in catalysis, crosslinking, paint or sealant applications, and it is often added last to prevent undesired pre-reactions with water or other components. It also may be applied as a primer from dilute solution.

In coating applications, thin, polymeric TiO₂ layers may be formed via thermal or hydrolytic processes.

Total or partial hydrolysis of Tyzor® OGT in sol-gel applications, typically in combination with other metal alkoxides, produces metal oxide systems for use as binders or coatings.

TYPICAL PROPERTIES

PROPERTY	TYPICAL VALUE
TiO ₂ %, approx.	12.7
Active content, %, approx.	100
Color	Colorless to yellow
Density @ 20 °C (68 °F) , g/ml (lb/gal), approx.	1.03 (8.60)
Viscosity @ 20 °C (68 °F), mPa, approx.	3500
Pour point, °C (°F), approx.	-55 (-67)
Flash point, °C (°F), approx.	55 (131)
Solubility	Miscible in most organic solvents. Decomposes in water

SAFETY and HANDLING

Please refer to the current Material Safety Data Sheet for detailed safety, handling and toxicity information.

TYPICAL SHELF LIFE

2 years



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