

Technical Data Sheet

TiLinkTM TCA-BEAT

Chemical Name

dibutoxybis(ethyl acetoacetato-O1',O3)titanium

Synonyms

dibutoxytitanium bis(ethyl acetoacetate)

CAS Number

20753-28-0

Molecular Structure

Equivalent Product

Tyzor BEAT from DuPont (now DorfKetal)

Description and Application

TiLink TCA-BEAT, Dibutoxybis(ethyl acetoacetato-o1', o3) titanium, is a titanium ethylacetoacetate, bis(ethylacetoacetato) bis(alkanolato) titanium, that is a solvent free titanium chelate with ethylacetoacetate as chelating agent. It is the equivalent product to Tyzor BEAT from DuPont with CAS No. 20753-28-0.

Some commercial applications are as below for your information:

- 1. RTV-1 silicone sealants: (methoxy, oximo, benzamido systems) drying agent or water scavenger; Catalyst for silane crosslinking with silicones; Crosslinking agent; Adhesion promoter to different substrates.
- 2. Printing inks: (solvent based with NC, PVB, CAB, CAP etc. Paint binder) crosslinking of the paint giving better drying, solvent resistance, heat resistance and adhesion to substrates (such as aluminum or polyolefin foils) optimum results can be achieved by addition of small



amounts of acids such as acetic acid.

- 3. Paints: Crosslinking of paint binders; Adhesion promotion; Binder component for high temperature paints.
- 4. Addition reactions: (e. G. PUR, EP sealant, adhesives, thermoplastic PUR) catalysis under mild conditions.
- 5. Esterification (polyester, different esters) elimination of by products, high yield, easy work up.
- 6. Esterification esters / polyester for different applications such as fibers, films, UP resins, paint binder, different esters mild conditions, no by products, high yield, easy work up, low catalyst concentrations.
- 7. Coating (glass or metal treatment, filler, pigment coating), surface hardness, adhesion promotion, improved dispersibility, coloring effects, heat and light reflection, corrosion protection.
- 8. Oxides via sol-gel process (metal coatings for corrosion protection) simple process for special oxides as coatings in combination with other metal alkoxides.

Typical Properties	
Index	Value
Physical Form:	Liquid
TiO2 content:	17.0 %
Melting point	< -30 °C
Flash point:	55°C CHEMICAL
Density @ 20 °C	1.08 g/cm3
Viscosity @ 20 °C	30 mPa.s

Packing

The regular packing of TiLink TCA-BEAT is 25 liters plastic pail and 200 liters steel drum.

Storage and Shelf Life

Should be stored in dry, cool, ventilated room; keep away from water, moisture, high temperature and fire. This product has a shelf life of at least 12 months if stored in tightly



closed original container at room temperature.

If this product is kept beyond the shelf life recommend on the product label, it is not necessarily unusable, but a quality control should be performed on the properties relevant to the application.

