



Shandong East Sunrise New Materials Co., Ltd

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Edition No.: SRTDS-TET2024-1

TET TDS		
Product name	Tetra-ethyl titanate (TET)	
CAS No.	3087-36-3	
Content	TET:83.5-86.5% TIPT:13.5-16.5%	
Molecular formula	C ₈ H ₂₀ O ₄ Ti	
Molecular Weight	228	
Flashpoint	33-43°C	
Boiling point	150-155°C	
Pour Point	-40°C	
Rafractive Index(25°C)	1.490-1.510	
Packing	200kgs/drum,1000kgs/IBC drum	
Specification		
Item	Specification	Results
Appearance	light yellow liquid	light yellow liquid
TiO 2 content(%)	33.0-35.0	34.20
Density(20/20°C)	1.08-1.10	1.09
Volatiles	1.0% Max	0.5%
Description: TET is tetra ethyl titanate, a reactive liquid organic titanate with 100 % active content that is very sensitive to moisture.		
Applications:		
➤ REACTION CATALYST: TET is used as a Lewis acid catalyst for esterification, transesterification, condensation and addition reactions. Typical reaction products include (meth)acrylic esters, polyester, plasticizers, various esters and polyurethanes. Benefits include elimination of byproducts, increased yield, easy work-up, low catalyst concentration and low toxicity.		
➤ CROSSLINKING: TET can be used to crosslink polymers or binders containing functional groups such as – OH or –COOH.		
➤ COATINGS: Glass, metals, fillers and pigments can be treated with TET to increase surface hardness, promote adhesion, improve resistance to heat, chemicals, corrosion and scratches, add iridescence or coloring effects or enhance light reflection.		
➤ TiO₂ PIGMENT AND FILMS: Micro- or nano-scale TiO ₂ pigments can be formed from TET, which also can also be used to create polymeric TiO ₂ films on surfaces via pyrolytic or hydrolytic (e.g. sol-gel) processes. Total or partial hydrolysis of TET in sol-gel applications, typically in combination with other metal alkoxides, produces metal oxide systems for use as binders or coatings.		