High Performance Chemicals Ti0₂







DUOKEM a Dual Benefit From Kemicals

DuoKem is a USA chemical company. Geared with the ability to work on between multiple short and long term projects at any one time, meet deadlines, while maintaining focus despite conflicting demands. Able to quickly learn market needs and become proficient with new process solving skills. Capable of utilizing logic to effectively provide solutions and solve chemical problems.

Regionally committed to continuous improvement. Passionate for innovative ideas, coupled with the ability to understand and assimilate customer needs. Looking for challenges and the opportunity to make a positive difference in the industries we go after.



We formulate and manufacture high-quality chemicals at a competitive price for a myriad of different industries. Our Engineers are seasoned and have several years of experience, servicing different industrial sectors to provide not only excellent products but technical support to overcome any formulation and processing problems.

At DuoKem we know chemistry and in addition to having a common passion for it, we possess a set of values that express our renewed commitment to excellence in what we do.

We have mastered the producing technology of high quality and low heavy metal TiO_2 very well. Our Toller is TiO_2 ISO9001:2008 certified and they are EU REACH officially registered, $T\ddot{U}V$ company assesses the ISO14001:2004 Environmental Management System. Also, to comply with the international environmental standard requirements, all our TiO_2 products have passed the SGS and RoHS heavy metals test meeting the non-pollution requirements.

Insisting on improving the product quality and the brand image, we continue to perfect our sales and service system to timely introduce new products that are highly cost-effective to the market demand and customer requirements. We have established good long- term relationship with customers in our region and proud to say that some of them are among the 500 world's strongest enterprises to utilize our TiO2 products.

DuoKem is a Texas based company your company can trust.





R9310





Product Description:

R9310 is a general use, multi-purpose rutile titanium dioxide pigment, coated with dense ZrO₂ & Al₂O₃ and special organic surface treatment. Product quality is very close to international advanced chloride process TiO₂ products. This product has extreme whiteness and gloss, blue undertone, superfine particle size & narrow particle size-distribution, great UV-absorbing capacity, outstanding weatherability and chalk resistance, excellent hiding power and tinting strength, very good dispersion and stability. This product has also high gloss retention and tint retention ensuring long term exposure to weather conditions.

Applications:

Rutile Titanium Dioxide pigment R9310 is a high-performance grade for general use and multi-purpose industries. Widely used in applications such as indoor and outdoor coatings, interior and exterior latex paints, industrial coatings, powder coatings, plastics (PVC, PE, polystyrene and polyurethane among others), masterbatch, PVC profile, rubber, high-grade printing ink and paper making.

Basic Information:

Chemical Name:	Titanium Dioxide (TiO ₂)
CAS NO.:	13463-67-7
EINECS NO.:	236-675-5
Color Index:	77891, pigment white 6
ISO591-1:2000:	R2
ASTM D476-84:	III, IV
Appearance:	White powder
Specific gravity:	4.1 g/cm ³
Surface treatment:	Dense alumina, zirconia + organic



Technical Specifications: (Standard Q/SNBJ1-2012)

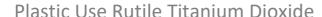
Property		R9310
TiO ₂ content	%	≥93.0
Rutile content	%	≥98.0
Color (compared with standard sample))	Not lower than
Δ L*(sample-standard sample)		≥-0.3
$\Delta s = (\Delta a^2 + \Delta b^2)^{0.5}$		≤0.5
Matter volatile at 105°C	%	≤0.5
Matter soluble in water	%	≤0.5
Sieve Residue45µm	%	≤0.05
Water suspension pH		6.5-8.0
Brightness	%	≥97.2
Oil absorption	g/100g	≤19.5
Tinting strength, Reynolds number		≥1850

Package:

25kg paper/poly bag and 500kg/1000kg big woven plastic bag.

Storage and Safety:

R992





Product Description:

R992 for plastic applications is a rutile titanium dioxide pigment manufactured by sulphate process. It is coated with SiO₂& Al₂O₃ and has low level special organic surface treatment, which makes it have excellent pigment properties with superfine particle size, good whiteness, blue undertone, strong tinting strength and hiding power, low volatile content. It also has excellent powder dry-flow ability and good processability to make it easy to scatter in plastic & rubber. R992 can improve the thermal resistance and yellowing resistance of the plastic products, better its mechanical properties and at the same time prevent the penetration of the UV impact to increase its durability, light and chalk resistance.

Applications:

Rutile titanium dioxide pigment R992 is exclusive for plastics, mainly applied in a broad range of polymers such as PVC, flexible PVC, PE, PS and PU among others, masterbatches, polyolefin thin films, ABS engineering plastics, rubber, printing ink and leather color paste.

Basic Information:

Name:	Titanium Dioxide (TiO2)	
CAS NO.:	13463-67-7	
EINECS NO.:	236-675-5	
Color Index:	77891, pigment white 6	
ISO591-1:2000:	R2	
ASTM D476-84:	II	
Appearance:	White powder	
Specific gravity:	4.1 g/cm ³	
Surface treatment:	alumina, silica + organic	



Technical Specifications:

Property		R992
TiO ₂ content	%	≥95.0
Rutile content	%	≥98.0
Color (compared with standard sample)		Not lower than
Δ L*(sample-standard sample)		≥-0.3
$\Delta s = (\Delta a^2 + \Delta b^2)^{0.5}$		≤0.5
Matter volatile at 105°C	%	≤0.3
Matter soluble in water	%	≤0.5
Sieve Residue45µm	%	≤0.1
Water suspension pH		6.2-9.0
Brightness	%	≥97.0
Oil absorption	g/100g	≤19
Tinting strength, Reynolds number		≥1850

Package:

25kg paper/poly bag and 500kg/1000kg big woven plastic bag.

Storage and Safety:

R300



Chemical Fiber Grade Titanium Dioxide

Product Description:

R300 is great for chemical fiber. It is an anatase titanium dioxide manufactured by sulphate process. This product adopts international advanced technology. It is not soluble in water; it has no physiological toxicity and possesses a high chemical stability. It does also have outstanding optical performance with key features such as very high purity, lowest iron, smaller particle size and narrow particle size distribution. It has a bluish undertone with excellent whiteness. This is a very easy to disperse grade both in water and ethylene glycol solvent.

Applications:

Anatase titanium dioxide R300 takes advantage of refraction force difference between titanium pigment and chemical fiber. It has very high whiteness, superior tinting strength and hiding power, it can reduce light reflex force of chemical fiber, improve its opacity and eliminate unsuitable gloss so it can achieve the similar function of natural fibers.

Anatase titanium dioxide R300 is mainly used as delustering of chemical fiber such as polyester fibers, viscose fibers, polyamide fibers

and polypropylene fiber among others.

Basic Information:

Name:	Titanium Dioxide (TiO2)
CAS NO.:	13463-67-7
EINECS NO.:	236-675-5
Color Index:	77891, pigment white 6
ISO591-1:2000:	A1
ASTM D476-84:	1
Appearance:	White powder
Specific gravity:	3.9 g/cm ³



Technical Specifications:

Property		R300
TiO ₂ Content	%	≥98.5
Color (compared with standard sample) ΔL*(sample-standard sample)		Not Lower than ≥-0.3
$\Delta s = (\Delta a^2 + \Delta b^2)^{0.5}$		≤0.5
Matter volatile at 105ºC	%	≤0.3
Matter soluble in water	%	≤0.4
Sieve Residue45µm	%	≤0.03
Water suspension pH		6.0-8.0
Brightness	%	≥98.3
Tinting strength(compared with standard sample)	%	≥105
Resistivity of aqueous extract	Ω•m	≥30
Loss on ignition	%	≤0.35
Water dispersion	%	≥92.0
Rutile	%	≤0.5
Fe ₂ O ₃	%	≤0.005

Package:

25kg paper/poly bag and 500kg/1000kg big woven plastic bag.

Storage and Safety:

A10



General Use Economic Anatase Titanium Dioxide

Product Description:

A10 is an anatase titanium dioxide pigment manufactured by sulphate process. It is actively treated with unique surface dispersion technology by adding inorganic additives which can reduce the surface force between TiO2. It is made to enhance the powder dry-flow ability to greatly improve the dispersion properties. A10 is a high cost-effective product aiming at the demand of the market with good dispersion, good whiteness, high hiding power, tinting strength and low oil absorption.

Applications:

Anatase titanium dioxide A10 for general use is an economic product, which can be used in a wide range of applications such as architectural and decorative paints, plastic, masterbatch, rubber, ink, leather and paper-making, as well as glass, ceramics, enamel making among others.

Basic Information:

Name:	Titanium Dioxide (TiO2)
CAS NO.:	13463-67-7
EINECS NO.:	236-675-5
Color Index:	77891, pigment white 6
ISO591-1:2000:	A1
ASTM D476-84:	I
Appearance:	White powder
Specific gravity:	$3.9 \mathrm{g/cm}^3$



Technical Specifications:

Property		A10
TiO ₂ Content (compared with standard sample)	%	not lower than
Color (compared with standard sample)		not lower than
ΔL*(sample-standard sample)		≥-0.3
$\Delta s = (\Delta a^2 + \Delta b^2)^{0.5}$		≤0.5
Matter volatile at 105°C	%	≤0.6
Matter soluble in water	%	≤0.5
Sieve Residue45µm	%	≤0.1
Water suspension pH		6.0-8.5
Bright (compared with standard sample)	%	Close to
Oil absorption	g/100g	≤26
Tinting strength (compared with standard sample)	%	≥100

Package:

25kg paper/poly bag and 500kg/1000kg big woven plastic bag.

Storage and Safety:







DuoKem USA 2016 Main St. Suite 1604 Clutch City TX 77002

E-mail: <u>lcaro@duokem.com</u>

DuoKem MexicoCalle Membrillo No. 277, Int1.
Claveria
Mexico City

E-mail: cgomez@duokem.com

DuoKem Colombia Calle 9a # 69 – 61 Marsella Bogota

E-mail: mlugo@duokem.com

DuoKem Argentina
Santa Fe 387 Open Doors
Lujan
Buenos Aires
jgarzon@duokem.com

All information and statements contained herein are believed to be accurate; however, DuoKem LLC, its agents and/or affiliates give no warranty with respect thereto, including but not limited to any results to be obtained or the non-infringement of any proprietary right. Use or application of such information or statements or the material or systems described herein is at user's sole discretion and risk, and consequently user acknowledges that DuoKem LLC, its agents and/or affiliates shall bear no responsibility or liability for same. Nothing herein shall be construed as a license of or recommendation for use, especially with concern to the potential infringement of any proprietary right. All sales are subject to the respective Standard Terms & Conditions of Sale issued by DuoKem LLC or - as the case may be, including but not limited to the Limited Warranty clauses contained therein.