Ti-Pure™

TS-4657 Titanium Dioxide

Product Information

Product Description

Ti-Pure™ TS-4657 is a rutile titanium dioxide pigment, manufactured by the chloride process. It is a brighter grade with the right cost/performance ratio for a wide range of printing technologies and product applications.

Ti-Pure™ TS-4657 is a viable alternative to sulfate offerings. It can also be blended for long print runs or applications that are very sensitive to abrasion. It is offered through the most flexible and reliable supply chain.

Ti-Pure™ TS-4657 has the following general properties.

Table 1.

Physical Properties of Ti-Pure™ TS-4657

Property	TS-4657
TiO_2, wt%, min.	93
Alumina, wt%	2.2
Amorphous Silica, wt%	3.1
Specific Gravity	4.0
Organic Treatment	Yes
Color CIE L*	99.7
Median Particle Size, µm	0.36
BET Surface Area, m^2/g	14
pH	8.7
Daetwyler Abrasion, mg	< 15
Carbon Black Undertone	13.8

Note: All values are typical unless otherwise specified.

Excellent Dispersibility

The alumina (Al_2O_3) surface treatment reduces the contact between TiO_2 particles, resulting in excellent dispersion of Ti-Pure™ TS-4657.

Innovative Production Technology

Ti-Pure™ TS-4657 is a chloride grade with low abrasion; it can be blended at high ratio with other standard ink grades to provide the desired abrasion performance for highly demanding applications.

Light Scattering

Our production technology delivers a consistent opacity and tinting strength, allowing formulations to have less adjustments when Ti-Pure™ TS-4657 is used.

High Brightness and Whiteness

The chloride process delivers pigments with high purity level, making Ti-Pure™ TS-4657 the right selection for whiter and brighter products.

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Table 2.

Typical performance of Ti-Pure™ TS-4657 in ink formulations[1]

	Nitrocelullose Ink		Polyamide/Nitrocelullose Ink		Vinyl Ink	
	TS-4657	Standard Ink Grade	TS-4657	Standard Ink Grade	TS-4657	Standard Ink Grade
Whiteness (L*)	●	○	●	○	●	○
Clarity (b*)	●	◐	●	◐	●	◐
Opacity Strength (CR at 1 mil)	●	●	●	●	●	●
Scats at 7.5 H	●	●	●	●	●	●
Daetwyler abrasion (µg)	◐	●	◐	●	◐	●
Gloss (at 20°)	◐	●	◐	●	◐	●

Key: ● Excellent ◐ Good ○ Low

[1]based on our internal test methods and on blind tests with third parties

Shipping Containers

Ti-Pure™ TS-4657 is available in 25-kg paper bags and bulk containers (1 metric ton). Truckload shipments of the dry product are available directly from Chemours. Less-than-truckload volumes are available through one of the authorized Chemours distributors.

Product Storage

The shelf life of Ti-Pure™ TiO_2 is indefinite as long as the material is kept from direct contact with moisture.

For further information about this grade or to request a sample, please see the Ti-Pure web site.

www.titanium.chemours.com

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