

May, 2019

Issue 2

## PY74 Substitution Solutions

At the moment there is a high demand for PY74, but the price fluctuates a lot and this causes problems for our customers.

To respond to market needs and to serve our customers, Trust Chem has tested the relevant pigments in its paint and ink systems and formulated substitution solutions for PY74.

The results the comparison between PY74 and the proposed substitutes are shown below:

Application		Solution	Quality difference
PAINT	Opaque type	We suggest using TCY15101 or TCY19401G to replace TCY07402O	<b>TCY15101</b> is greener, has a lower color strength and is more transparent than TCY07402O. The viscosity is similar. Substitution in a solvent based system is recommended. <b>TCY19401G</b> is greener and more transparent than TCY07402O. The viscosity is slightly different while the color strength is very similar. Substitution in solvent- and water-based systems is recommended.
	Transparent type	We suggest using TCY15501W to replace TCY07401	<b>TCY15501W</b> is greener, more transparent and has a slightly different viscosity than TCY07401. The color strength is higher in water-based systems and lower in solvent-borne systems.
INK	Offset	We suggest using TCY18501L or TCY18002F to replace TCY07403W or TCY07401	<b>TCY18501L</b> is greener, has a higher and better rheology and is more opaque than TCY07403W or TCY07401. It will be opaque even if the amount of the pigment is reduced. <b>TCY18002F</b> is more transparent than TCY07403W or TCY07401. It offers a lower color strength, lower hue, and lower optical density. The rheology is very similar. The rheology will be worse if the amount of pigment used is increased to obtain the desired optical density.
	W/B	We suggest using TCY15501W to replace TCY07403W	<b>TCY15501W</b> is greener and has a lower color strength than TCY07403W. It is also more transparent than TCY07403W with a very similar gloss level. Viscosity is slightly different.
	S/B	We suggest using TCY15501W to replace TCY07403T or TCY07401	<b>TCY15501W</b> is greener with a lower color strength and is slightly more opaque than TCY07403T. Gloss levels are similar and the viscosity is slightly different. TCY15501W has a slightly lower color strength, higher gloss and slightly different viscosity, and is more transparent than TCY07401.

All the replace solution needs to be confirmed by the customers. If you require more information, please contact us at any time.



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[www.trustchem.cn](http://www.trustchem.cn)  
[www.trustchem.eu](http://www.trustchem.eu)  
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## Fiber Grade Organic Pigments

There are various methods for processing plastic, of which some of the main ones are injection molding, film blowing and fiber spinning. Fiber spinning is a key process for plastic that is widely used in aerospace, industry, agriculture, construction, water conservancy, transportation, medical care and other fields. The molten plastic is forced through the tiny holes of a spinneret, which have a broad diameter range to form a fiber bundle with a fine, uniform and high-quality texture. This production technique imposes higher performance dispersion requirements on coloring pigments.

Trust Chem is committed to becoming the solution provider of choice for organic pigment and has developed a range of organic pigments specifically for plastic fiber spinning customers.

These products offer the benefits of uniform crystal distribution, small particle size, easy dispersion and good resistance. They meet the requirements of various laws and regulations and have been widely used in numerous different plastic spinning fields.

Catalogue of fiber grade pigments from Trust Chem

Color	TC Product
YELLOW	TCY06203, TCY13861,TCY13904,TCY18001E,TCY18301
RED	TCR48204,TCR48303,TCR57110,TCR12203FG,TCR14401,TCR21401,TCR20205,TCR24202,TCR25402
ORANGE	TCO06401
BLUE	TCB15105A, TCB15321K
VIOLET	TCV01902
GREEN	TCG00731K

## Transparent Iron Oxide Pigments

Transparent iron oxide pigments are also known as Nano-iron oxides. The macro-axis and minor-axis of the primary particle is 43nm and 9nm respectively. The specific surface area is 105-150m<sup>2</sup>/g.

Transparent iron oxide pigments exhibit high levels of transparency and tinting strength, excellent chemical stability, superior light fastness, weather resistance, solvent resistance and migration resistance. They are strong absorbers of ultraviolet radiation. They are non-toxic as well as being environmentally friendly. Protecting the lignum in wood from UV attack and thus degradation.

A further feature of transparent iron oxide pigments is their high heat resistance properties; PR101 can withstand up to 500°C, and PY42 can withstand up to 160°C.

The main application areas for transparent iron oxide pigments are in wood finishes, automotive topcoats, artist's paints, industrial paint, ink, plastic and rubber.

The pigments have been REACH registered and are in compliance with the relevant requirements of the EU REACH regulation.

Product Range

Color Index	Product Code	Main Properties
PY42	TCY04201	High transparency, higher tinting strength than TCY04202
PY42	TCY04202	High transparency
PR101	TCR10101	High transparency
PR101	TCR10103	High transparency, bluer than TCR10101



## Trust Chem and REACH

REACH stands for Registration, Evaluation and Authorization of Chemicals. In force since June 1st, 2007, it is the only European Chemical Control Regulation [(EC) No 1907/2006]. The REACH regulation applies to 31 European Union countries, namely 28 European Union Member States and three countries in the European Economic Area (Norway, Iceland, Liechtenstein). REACH requires each industry to be responsible for the safe manufacture and use of chemical substances. Manufacturers/importers must register all in-scope substances manufactured/imported in quantities of one metric ton or more.

Trust Chem actively prepared for the implementation of REACH. Our EHS team developed an inventory of eligible substances included in the products we manufacture or export to the EU, and pre-registered these substances before December 1st, 2008. Since then, we have been actively monitoring all our substances to ensure we maintain compliance with pre-registration and registration obligations.

Trust Chem led the way in responding to REACH completing most registrations in the domestic organic pigment industry. Trust Chem obtained the first REACH registration number on November 3rd, 2010. By January 1st, 2019, Trust Chem had concluded registration of a total of 82 substances.



## European Coatings Show 2019 – We Color the World!



The European Coatings Show is one of the coatings industry's most respected and specialist trade shows. The event is held every two years, with the most recent show taking place in Nuremberg, Germany, from March 19th- 21st 2019. This is the eighth time Trust Chem exhibited at this prestigious event. More than 1,000 companies showcased their products and services at the fair, which attracted more than 40,000 visitors from all over the world.

During the European Coatings Show, more than 150 customers visited us on our booth. We held in-depth discussions on technical innovations and commercial matters and exchanged thoughts on the opportunities and challenges facing the industry. We also displayed our complete product portfolio and professional technical expertise to customers and were delighted to further promote Trust Chem to the world. On the evening of March 19th, we held a "Happy Hour" party at the booth and enjoyed strengthening our relationship with our customers.

As an organization focused on sustainable development and with global influence, Trust Chem is committed to being down-to-earth, efficient and innovative. We strive to share progress with our customers and jointly create a colorful world.

## Middle East Coatings Show 2019

Trust Chem successfully participated in the Middle East Coatings Show, which took place in Dubai, U.A.E from February 26th - 28th this year. The exhibition is held annually and is the only specialist coatings exhibition for raw material suppliers and equipment manufacturers in the coatings industry in the Middle East and Gulf region.

From its first attendance at the Middle East Coatings Show Trust Chem gained a deeper understanding of the current status of the organic pigments market in the Middle East. This will allow us to provide more targeted support to the region and develop cooperation opportunities so that we can expand further in the Middle Eastern market. Challenges and opportunities coexist, but Trust Chem aims to deliver greater value for customers through better products and services.

