IQChem Newsletter

Edition 1/16

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IQC Coat Red 188 - alternative to Novoperm Red HF3S70

We have recently added the opaque version of the **PR 188** to our portfolio**.** This is a Naphtol AS pigment which offers a brilliant yellowish red shade with good light and weather fastness in deep shades.

It can be used in industrial paints and is compatible with the most common paint systems. This pigment is of particular interest for lead-free formulations.

In combination with inorganic or other organic pigments like PY 139, its opacity is of interest for the preparation of RAL orange or bright red shades. One particular advantage is the possible replacement of PO 36 due to its cleaner shade and higher color strength.

Our testing results versus the benchmark Novoperm Red HF3S 70 are listed below:

Masstone 5% in Acrylic paint	**Δ L***	**Δ C***	**Δ h***	**Δ E**	
IQC Coat Red 188	-0.17	-0.83	0.0	0.85	
White reduction 1:19 pigt:TiO_2	**Δ** L*	**Δ** C*	**Δ** h*	**Δ E**	**Color Strength**
	-0.1	-0.23	0.04	0.25	100 %

Presence in Italy, Spain and Portugal strengthened

IQChem has a global marketing presence. Our commercial network is based on local agents and distributors, with vast experience in the coating and plastic industries.In Italy, we collaborate with **Came** in Orrigio (MI) in the coatings market and with **G.B. Chem Srl** in the plastics market for one year. Mr. Guido Borghi from GBChem has worked for a few distributors in the plastic industry in Italy, including some distributors of organic pigments.

In Spain and Portugal during March 2016 we completed a distribution agreement with **Additives & Surfactants S.L.U.** in Barcelona. They have recently started activities in pigments, and have decided to collaborate with IQChem. Mr. Xavier Palacin will be your local partner. He has a long history of working in the pigment business and his experience will prove to be invaluable to IQChem and our customers.

To find contact details of all our partners, please consult our website: www.iqchem.com

Dr. Alfred Betschart, Chairman

Pigment business and Economy 4.0

2015 will be recorded in Europe's economic history as another year of stagnation. Larry Summers, the former Harvard professor, Secretary of the Treasury for Clinton and the Director of the National Economic Council for Obama, is talking already about secular stagnation. Prof. Robert Gordon sees the reason for it in a lack of fundamental innovations. He's of the opinion that the major profits of digitalization have already been harvested. There will be no Economy 4.0.

Additionally to this general trend there are problems specific to Europe – and home-made. The EU has led to regulatory overkill in all business activities. (Re-)Distribution of wealth has become more important than creation of wealth. France and Greece have become the sick men of Europe with Italy, Spain and Portugal trying hard not to fall into the same trap.

All these factors also influence our business in pigments. The last major group of pigments, the diketo-pyrrolo-pyrrole (DPP) pigments, was invented in the 1970s – among the inventors was Dr. Abul Iqbal, a co-founder of IQChem. Pigments have become a mature market. Demand in Europe, particularly in Southern Europe, is low. And the situation in other markets, from Brazil to Russia and China, is not brilliant either. Regulatory restrictions have become tougher and tougher over the last two decades, from laws on indirect food contact and toys to REACH – and there is a strong tendency to copy Europe's excessive laws not only in big markets such as China, but also in smaller ones such as Turkey, Taiwan or Malaysia.

The pigment market is stagnating. BASF and Clariant announced to separate their pigment and related businesses into separate units – a move which is normally considered to be the first step to their sale. As a business can profitably be sold only when turn-over is increasing, this resulted in a war for higher turn-over led by the two traditional producers against their Chinese and Indian competitors. The fact that one of the largest Chinese producers was absent from the last ECS and that some even had to temporarily shut down their production speaks volumes about the current situation in the pigment market.

In difficult times basic truths of sailing may be of help: "You cannot change the wind, you can only adjust the sails" and "Do not lose your target out of sight". This is also valid for IQChem. With this newsletter we want to show you that IQChem continues to be committed to its mission – the mission of offering our customers a continuously growing range of high performance pigments in consistent quality in combination with reliable services by our laboratory and our logistics department.

We support you in Oeko-Tex® Standard 100 certification projects

The initial selection of a pigment depends of course on the application medium and the expected performances, being heat stability and fastness properties like resistance to solvents or light for example.

When it comes to specific applications like food contact applications or toys, other criteria have to be fulfilled: content of aromatic amines or heavy metals. We do check the compliance of our product with relevant regulations.

For our customers in the stationaries field, we check, for example, the compliance with the EN 71:3 for heavy metals and with the EN 71:9 for presence of toxic aromatic amines.

The selection of a pigment for a new project needs expertise in the pigment chemistry. It is important to eliminate right from the beginning pigments that could lead to some problems with the regulation the customer has to fulfill. Knowing the starting raw materials and the process, you can define which organic pigment candidate should be chosen before starting technical evaluation.

Particularly demanding projects are the ones that require compliance with the Oeko-Tex® specifications.

This demand is mainly for customers that are active in the apparel downstream business. It can be producers of synthetic fibers or producers of inks for the textile industry.

In the last year, we have been successful in running projects with customers involved with Oeko-Tex® Standard 100 certification.

The Oeko-Tex® threshold limits are listed for numerous chemicals. As far as it concerns organic pigments, one has to focus his attention on the presence of heavy metals, traces of chlorinated solvents and the presence of aromatic carcinogenic amines.

An interesting example was the selection of a PV 23 grade. Here the main concern is the presence of dichlorobenzene because this is the solvent where the synthesis is performed. In close collaboration with our customer, we defined threshold limit in their final application based on the limit value fixed by the Oeko-Tex® standard.

Then we have sourced a PV 23 grade with the lowest dichlorobenzene content in the pigment powder. With the constraint to find a pigment that performs properly in their particular production process. After a few trials, with the support also of our partner in China, we have been able to select the right candidate in the piloting phase. This has been confirmed with further industrial trials.

IQchem can support its customers in challenging projects based on pigment chemistry knowledge and technical know-how.

Dr. Bruno Piastra, Managing Director

We can perform QC with your testing method

For testing in plastics, we run standardized tests in soft PVC film.

We are equipped with a Dr. Collin roll-mill, W110 AP.

For some customers we adapt our QC method in order to be closer to their production parameters.

The test results on the roll-mill depend on a few parameters:

- diameter of the cylinders
- gap between the two rolls
- processing temperature
- friction coefficient
- formulation of the soft PVC (type of plasticizer and ratio)

A typical example was the case of the PY 110 used in the coloration of calendered PVC film. In order to match quality specifications for one big customer, we had to adapt our QC method.

In close collaboration with our customer, we have analyzed the differences in our test methods and defined correlations between the two methods. This was the first step to be able to carefully select batches and guarantee a constant quality for their high demanding application.

We now specifically implement their test method in our lab with their PVC compound for performing the QC for this customer.

We are able to adapt our QC methods to our customer's requirements and provide a better service to our customers. Our laboratory and our expertise allow us to work closer with your requirements.

Don't hesitate to contact us or our local partner for any specific demand.

Claudine Langenbronn, Head of Logistics

Our logistics organization

Mrs. Claudine Langenbronn is responsible for our logistics operations. Claudine has worked many years for a large international chemical group in different functions like production planning and purchasing.

She takes care of imports from Far East and exports to our customers, being in EU or outside EU. In close contact with our logistic partners she is also checking that custom clearances formalities are properly managed.

Our stock in EU is located in Weil am Rhein/DE close to Basel/CH. The inventory management and invoicing are processed through our ERP system.

Claudine is also organizing the transport of the goods to your plant, informing you in due time.
In the person of Claudine, you have a professional at your service.