

PRETIOX has definitely taken over all the continents

At present, travelling possibilities are significantly limited by various anti-epidemic measures, but, fortunately, this does not apply to our products. It is rather the other way round. As time goes by our goods are reaching yet more distant places owing to a wide range of products, sometimes even to very remote corners of the Earth. And especially nowadays we can only envy them. Therefore, let us have a look at all the continents with the help of our PRETIOX product portfolio and their selected applications and also at the possibilities of their wide-ranging application.



line is in its final phase of testing in two North American companies, which are about to start a semi-operational production in the first half of this year.

On the other hand, when it comes to **Central and South America** typical supplies there have long been those of the food-grade types of PRETIOX AV01FG, the application of food colouring has predominantly been represented by the colouring of corn tortillas. Especially in Mexico, tortillas are an integral part of the local cuisine, they come in various flavours and colours, which are not created only with the use of different types of corn. And especially the lighter kinds of tortillas are more popular.

As far as the biggest continent, **Asia**, is concerned we could spend a long time choosing the most interesting region, but if we limit ourselves

Let us start on home ground of the Old World. In **Europe** probably all kinds of titanium dioxide are used, but specific demands are placed on some of them. A good example can be the treated rutile PRETIOX RGLP2 for lamination paper. This kind of paper is needed for the currently immensely popular floating flooring, as well as faux wood veneer for modern furniture, which has to be very lightfast and have homogenous and durable shade for the application of a print imitating wood structure. These properties are imparted mainly by the titanium dioxide but also by other substances, primarily by colourful inorganic pigments. Their fine structure plays a key role; therefore, they are required in micronized forms.

We have been supplying **North America** with standard pigment types of titanium dioxide for a number of years. In connection with a developed petrochemical industry in this region, it is logically worth mentioning our

new product, i.e., non-pigment dried hydrolysate TiO_2 , which, due to its chemical purity and the large specific surface area of its particles, meets the requirements as an active substance for the production of catalysts for petrochemical, automotive and even shipbuilding industry. PRETIOX CG300 from the new production drying



TiO_2 meets the requirements as an active substance for the production of catalyst for petrochemical industry.

Photo: Ingimage



Treated rutile PRETIOX RGLP2 for paper industry.

Photo: Shutterstock

to the volume consumed and the length of business cooperation, such a region would, undoubtedly, be India. We have been supplying PRETIOX RGX for plastics manufacturing there for decades, used mostly for the preparation of colour concentrates, predominantly from polyethylene and polypropylene. These concentrates (masterbatches) subsequently end up in products of everyday consumption, for instance, plastic films and packaging,

African albinos are protected with a cream with our UV absorbers.

Photo: Vojtěch Kunderát



drinks cups, toys, household containers and such like. When it comes to the titanium dioxide supplied to the Indian market, the typical requirement is for a high degree of undertone. That is to say blue undertone of TiO_2 , which neutralizes the colour of the standard yellow undertone of a raw polymer.

Africa from the north to the south includes various climatic areas, but generally speaking, this continent, which is situated on both sides of the equator, is considered to be the hottest one. And that in turn is connected with the amount of sunshine, naturally even the one harmful to people. Though from the demographic composition of its population it emerges that most people are naturally protected by their pigmentation, however, paradoxically there are even groups of the most weakened, who are genetically strongly prone to skin cancer, i.e., African albinos.

Almost since the beginning of our semi-operational production of UV absorbers from the PRETIOX UVS30 line we have been collaborating with

a group of Czech volunteers, academic workplaces, and companies. The result of this collaboration is various suntan lotions with protection factor of SPF30 and SPF50, which are affordable for African albinos. Laboratory tests confirmed the harmlessness and stability of these lotions. The last phase is the expiration tests conducted in the Czech Republic. The next step will be the production itself, which will be directly undertaken by the albinos in Ghanaian Accra.

Our customers, mainly in the sector of paints, can be found even on the smallest and probably the most scorched continent. On this continent the seasons go in a totally reverse order than we are used to in the Northern Hemisphere. Summer there starts in December and winter in June. Furthermore, there are big climatic differences between the north and the south of the continent. Namely **Australia** is the destination where we sell surface treated types, predominantly the most weather resistant product PRETIOX RGZW. On its

way there it covers tens of thousands of kilometers to reach the furthest destinations we supply. We have three customers there, a producer of decorative paints, a producer of construction fillers and of various rubber profiles.

And the best for last. **Antarctica**. Ice, snow, unrelenting winds, and piercing sunshine, such are the conditions, which are not ideal for life but are tailor-made for proving material resistance. That was the reason why this place was used even for testing the resistance of roofing rolls, which also contain titanium dioxide PRETIOX RG18P and AV01SF in their layers. The exposure near the South Pole is truly non-standard; short-term temperature curves by up to 40°C , wind speed well over 100kmph, similarly the amount of sunshine significantly oscillates between polar winter and summer, furthermore, the extensively depleted ozone layer lets through much more radiation. The combination of these climatic conditions is consequently useful for a long-term evaluation of the durability and behaviour of polymers in an environment, which has not been used so far. The research has been conducted since 2015 and reference samples are placed in the conditions of Central Europe.

Let us believe that we will continue to be successful in finding new business partners not only in the immediate neighbourhood, but also where the consumer will appreciate the frequently unique properties and quality of inorganic pigments from Přerov. Let us hope that in the near future we will be able to return to personal contact and negotiations, which are so important for our distinctive field of business.

Jan Příkryl

Scientific station in Antarctica, Ross Island.



Photo: Fatra a.s.