

dp

Great Solutions with Small Particles



more:value

sachtleben and kemira

Two experienced titanium dioxide specialists are pooling their activities: the modern TiO₂ plants operated by Sachtleben Chemie and Kemira Pigments will in future run under unified management. The corresponding joint venture has been set up by Rockwood Holdings Inc., of which Sachtleben is part, and Finland's Kemira Oyj chemicals group.

known name

The joint venture bears its own, independent, name: Sachtleben, a name which stands for 130 years of experience, high-quality products and global awareness. Customers of many years' standing know: you can trust Sachtleben's dependability and performance. This is the tradition that provides the basis for the joint road into a successful future.

economic benefits for customers

Sachtleben has strengthened its core capabilities. Its products and competent services assure extra functions, process advantages and genuine economic benefits. Sachtleben's product portfolio, which includes both titanium dioxide specialities and inorganic functional additives, assures the company a unique ranking among the world's pigment producers.



more:products

white pigments (TiO₂)

Anatase and rutile – Sachtleben supplies both of these titanium dioxide modifications. These white pigments are nontoxic and offer absolutely no hazard to health. Anatase TiO₂ is the focus of production at Duisburg, Germany. The rutile pigments produced at Pori, in Finland, complement the Duisburg range ideally. The pigment portfolio is completed by a variety of nano-grade titanium dioxide products.

functional additives (BaSO₄ and ZnS)

The new company's product portfolio also includes inorganic functional additives alongside the titanium-dioxide-based pigments. Sachtleben is the world's largest producer of synthetic barium sulfate specialities (BaSO₄) and also occupies a unique market ranking in the field of zinc sulfide pigments (ZnS). These functional particles impart useful extra properties to materials and products, assuring genuine competitive advantages for Sachtleben customers.

broad range of applications

TiO₂ particles and functional additives based on barium sulfate and zinc sulfide can be used in a very broad and diverse range of applications. Sachtleben is a leading supplier of anatase titanium dioxide to manufacturers of man-made fibers, provides innovative products for the coatings, plastics and paper industry, and has a high-level presence in the fields of nano-particle based and environmental products. This expertise is further augmented with special particles for printing inks, for the cosmetics, pharmaceuticals and foodstuffs industries and for catalysts. In addition to consistent product quality, Sachtleben also offers its customers comprehensive advisory and expert technical services.

more:capacity

duisburg and pori

In future, Sachtleben will produce titanium dioxide via the sulfate route at two locations in Europe: Duisburg, Germany, and Pori, Finland. Modern nanotechnology plants also operate at both locations. These production activities are independent of one another but complement each other ideally. Sachtleben is more than doubling its production capacities.

greater assuredness of supply

Customers around the globe will benefit from this expansion: siting production at two high-performance European locations guarantees enhanced flexibility, even greater assuredness of supply, and a broadened range of anatase and rutile specialities.

***) d u i s b u r g p o r i**
s a c h t l e b e n k e m i r a



130 years of tradition

Innovation has a long tradition at Sachtleben, reaching back to the year 1878, when the chemist Dr. Rudolf Sachtleben started development of Lithopone on the basis of barium sulfate and zinc sulfide. The world's first durable ingredient for white paints and coatings replaced toxic white lead and was considered the apogee of development work in this field - a valuable and worthwhile achievement. Sachtleben's research activities still enjoy international acclaim today.

concentrated know-how

As a dependable system partner for industry, Sachtleben develops tailor-made solutions for products and applications jointly with its customers. The new cooperation between the German and Finnish development departments boosts these capabilities yet again. Sachtleben now intends to deploy the new concentrated know-how to further accelerate progress in the field of inorganic pigments and to exploit it to achieve innovative new products and applications. Sachtleben is thus opening up access to new and highly attractive market segments for its customers.



responsible care and sustainable development

Sustainable economic management has become a synonym for the development of the viable enterprise of the future, most especially in the chemicals industry, which is committed to the principles of Responsible Care and Sustainable Development. Sachtleben, as a multinational, globally active company, implements this commitment everywhere, in every detail.

three pillars in balance

Sachtleben is careful to achieve a balance between the three pillars of sustainability. Development and production of innovative products and intelligent solutions assure economic growth. Ecological equilibrium achieved by the careful use of resources protects the environment; a good example of this is the waste-acid recycling plant, which in 1989 made Sachtleben the first titanium dioxide producers to achieve 100% recycling. Social progress means, for Sachtleben, assuring its employees' futures via continuous further training, the provision of safe and attractive workplaces, and the implementation of active industrial health and safety provisions.

more:great solutions with small particles



a shared corporate culture

Sachtleben exploits synergies and promotes knowledge-transfer in all sectors of its operations, from Research & Development, via Production and Quality Control, up to and including Logistics and Marketing. Day-to-day cooperation between 1,700 employees in Germany and Finland is thus giving rise to a shared culture that does not attempt to suppress differing viewpoints, but regards them, instead, as an enrichment of corporate life.

new strength

Because the challenges of global competition are growing, Sachtleben has also grown: its product portfolio has been broadened, its production capacities expanded, corporate know-how concentrated, and Sachtleben's presence on global markets intensified. The international Sachtleben network includes personal contacts in more than sixty countries around the globe. Sachtleben now possesses new strength, thus also strengthening its customers, to whom Sachtleben will, in future, be able to offer even more – more: Great Solutions with Small Particles.



coatings



performance rutile and blanc fixe crystals for paints and coatings

Modern coating systems combine high-level decorative and protection functions. Sachtleben's Blanc Fixe (synthetic BaSO_4) range of products optimizes the properties of high-quality paints and coatings. These particles improve gloss values, enhance impact resistance, are mechanically and chemically stable, and improve rheology. In the white-goods segment, Blanc Fixe crystals assist in replacing up to 30 percent of the titanium dioxide needed in powder-coating systems with ultra-low film thicknesses, achieving top-quality hiding gloss with a simultaneous cut in production costs. Sachtleben supplies the paints and coatings industry with rutile pigments possessing excellent whiteness, high scattering power, good gloss values and outstanding resistance to outdoor exposure, for practically all coating systems. Incorporation of these products into such systems is straightforward, thanks to their good dispersibility.



high-effect nano-titanium dioxide pigments

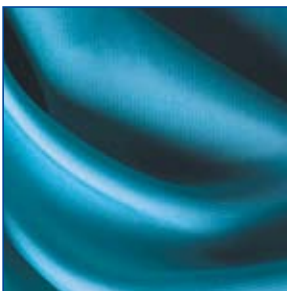
Sachtleben's nano-titanium dioxide pigments permit the achievement of fascinating optical effects, such as those of the so-called flip-flop finishes used on cars. These tiny particles are also highly effective in transparent wood protection products and as a dependable UV barrier in plastics and lacquers. Synthetic barium sulfate nanoparticles in high-end coatings are also a convincing example of both quality and cost-efficiency.





matting with hombitan anatase microcrystals

As an experienced system partner, Sachtleben develops functional products for the man-made fibers industry, and occupies a pole position globally in high-quality Hombitan anatase microcrystals for delustration of synthetic fibers. These top-quality microcrystals are notable for their excellent whiteness, high opacity, minimal abrasion, extremely good dispersibility and uniform distribution in the body of the fiber. They improve the fibers' UV stability and prevent discoloration of the polymer.



uv protection with nano-additives

Sachtleben also supplies special additives for the production of gloss fibers and for enhanced UV protection as well as nano-additives that achieve permanent UV blocking and are thus particularly kind to the skin and, in addition, chemically stable.



antiblocking particles for transparent films

Sachtleben has set new technological standards with its innovative antiblocking concept for the films segment. These specially designed particles provide transparent films with high gloss and assure maximum process dependability.



paper



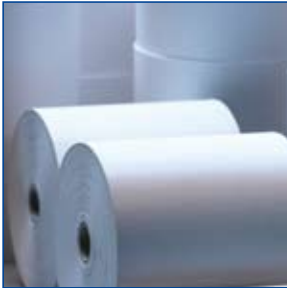
pigments for refined surfaces

Paper is a centuries old cultural asset that remains indispensable even in the multi-media age. Sachtleben supplies suitable TiO_2 and BaSO_4 products for use in both the pulp and/or the coating of high-quality papers and boards. Research has now opened up outstanding application potentials for synthetic barium sulfate particles, such as the barytes coating of extra fine photographic papers to assure high-gloss surfaces and brilliant colours.



barium sulfate additives for enhanced efficiency

A new barium-sulfate-based additive for paper produces clear benefits for high-quality coated boards (for use in foodstuffs packaging systems, for example): printability is improved significantly, gloss and colour brilliance are enhanced, and production costs significantly reduced simultaneously.





high-purity rutile and anatase bases

Of the large range of inorganic products made by Sachtleben, titanium dioxide, in particular, is especially suitable for applications in catalysis. The sulfate route offers opportunities to systematically obtain high-purity rutile and anatase bases, the chemical and physical properties of which can be individually adjusted within broad limits.



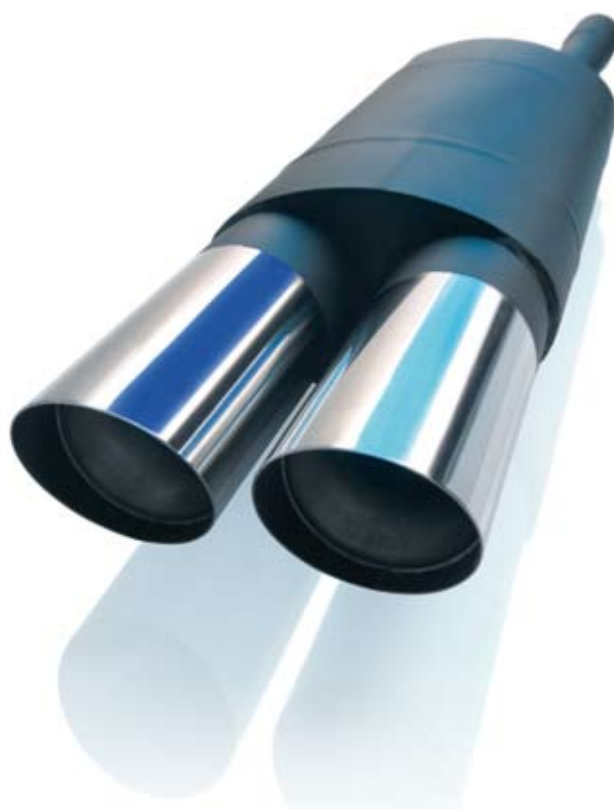
active in heterogeneous and photocatalysis

Sachtleben's titanium dioxide demonstrates its capabilities both in heterogeneous catalysis and as a photocatalyst. In the catalytic converter systems installed in motor-vehicles and power plants, titanium dioxide particles assist in the exhaust-gas cleaning (DeNOx) process. Micro and nanoparticles also show their special capabilities in waste-water treatment. In plasters and paints, their photocatalytic properties assure proactive prevention of room-air pollution. Active materials supplied by Sachtleben are also in successful use for the synthesis of enzymes and of complex organic molecules.



products containing iron for blast furnaces

Sachtleben developed high-fineness titanium-containing synthetic additives for the steel industry; this iron/titanium compound significantly prolongs blast furnace campaigns – another high-efficiency solution „made by Sachtleben“.



pharmaceuticals/cosmetics/foodstuffs



titanium dioxide of high chemical purity

Sachtleben's titanium dioxide meets the requirements of all the main international pharmacopoeias and is thus an indispensable additive for the pharmaceuticals and cosmetics industries. These pigments are used in tablet coatings and assure radiant whiteness and attractive colorations in toothpastes. X-ray barytes based on pure synthetic barium sulfate serve as the high-quality basis for the production of X-ray contrast agents and medical plastics.



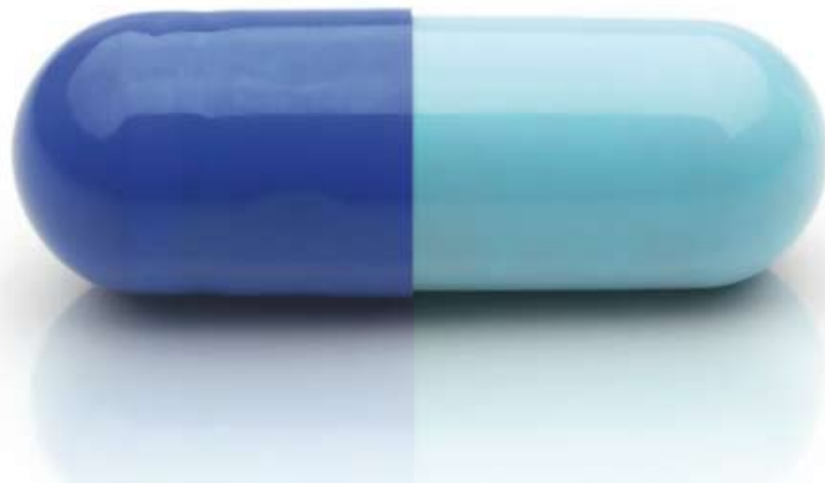
state-of-the-art UV-A and UV-B absorbers

Modern sun-blocker products would be inconceivable without the highly effective protection provided by UV filters based on ultrafine mineral titanium dioxide particles. Many people's increased awareness of the need for protection against shortwave UV radiation is, in addition, also opening up new applications in cosmetics for everyday use. State-of-the-art UV-A and UV-B absorbers are now available, in the form of the diverse Sachtleben product range.



kosher and halal certified

Sachtleben developed products specifically for the foodstuffs industry. High-purity titanium dioxide anatase grades meet the requirements of E 171 and the FDA (Food Additives Ordinance/Tobacco Ordinance) and also have Kosher and Halal certification.





additives for optimum product properties

Sachtleben pigments are used in a large and diverse range of applications in the plastics industry. Inorganic additives assist, for example, in the production of UV-barrier films and durable window systems. Sachtleben additives are also ideal for mechanical stability, and optimize the impact and bending strength of plastic products.



tailor-made solutions for modern materials

Zinc sulfide specialities are soft and white, and are therefore ideal where mechanical loadings are particularly high. They are used primarily in glass-fiber-reinforced plastics (GRPs). In elastomers and compounds, particles from Sachtleben are incorporated into temperature-resistant seals and technical components, in the automotive field, for example. Tailor-made solutions are also available to all customers for use in composites and polyvinyl chloride.



packaging and printing inks



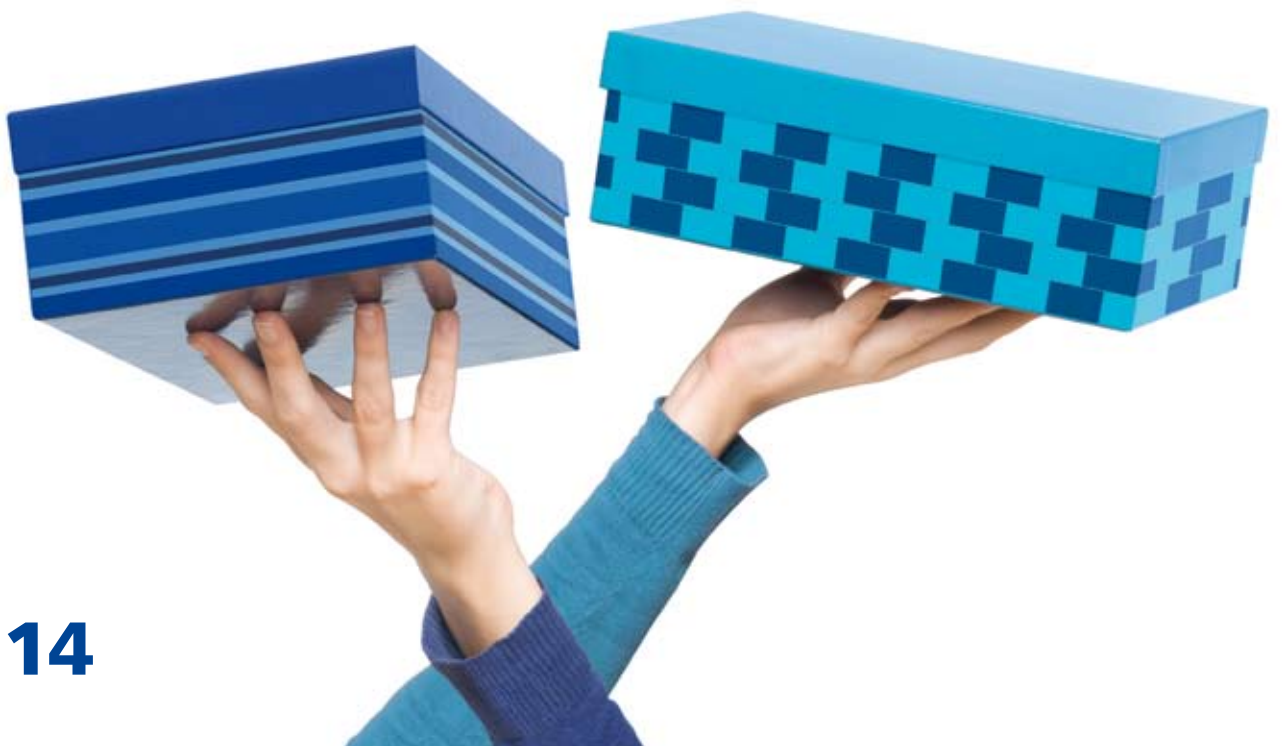
TiO₂ specialities for optimum hiding power

Sachtleben supplies highly visible benefits for the packaging and printing-ink industries - the special attraction of the packaging, and the recognizability of the brand, depend very largely on the printing ink used. Titanium dioxide is the most commonly used white pigment for production of packaging and printing inks, due to its optimum hiding power. Sachtleben's TiO₂ specialities guarantee optimum opacity and gloss, combined with excellent dispersibility, improving both productivity and quality. In addition, the soft titanium dioxide white pigments assure low abrasiveness.



diverse applications in the printing industry

Sachtleben's titanium dioxide pigments are the result of many years of experience and provide a unique diversity of particles and variations. They ensure that both flexible films and metal, paper and board packaging systems can be optimally printed.





products containing iron for water and cement

The purification of both drinking water and waste water is an important field of application for Sachtleben's environmental products. Ferric (III)sulfate is used as an economic and effective flocculant to eliminate ultrafine suspended matter.

Sachtleben's SachtoFer products improve the hydraulic setting performance and sulfate-resistance of cements. The ferrous (II) sulfate salts supplied by Sachtleben enable the cement industry to reduce the toxic hexavalent chromium content of its products and minimize health risks associated with the use of cement.



Great Solutions with Small Particles. Sachtleben.



pori/finland



61°34'49"N
21°33'28"E





51° 26' 35" N
6° 42' 24" E

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Great Solutions with Small Particles

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