PAPER, FILM COATINGS & NIP
Paper, Film Coatings & NIP: The paper and pulp industry is one of the most technically demanding industries. Non-impact printing (NIP) is a pioneering industry that has made possible print-on-demand technology, and so opened up entirely new business fields. Today, our range of customized additives and application-specific support and services in these segments, will help you perform pulping more efficiently, optimize printing processes, enhance film and paper finishing, or make filter technologies sustainable – all at an attractive price-performance ratio.
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Inkjet Printing
Trends such as digital printing call for high-quality coated inkjet papers. To provide you with high-grade binders and dispersions, we continually optimize our established POLYVIOL®, VINNACOAT®, VINNAPAS® and HDK® brands. They achieve especially impressive results in the printing of digital images, transforming them into dazzling photographic quality. The main benefits of POLYVIOL® and VINNACOAT® are their excellent binding properties for coating pigments, optimization of performance and ease of handling of the systems used. VINNAPAS® is compatible with cationic additives, improves leveling and print receptivity, and consequently gives inkjet papers a high-gloss coating. HDK®-based top coats pave the way for superbly detailed resolution on special glossy photo papers.

Products
HDK®, POLYVIOL®, VINNACOAT®, VINNAPAS®
See also: www.wacker.com ▶ Products & Markets ▶ Paper, Films & NIP ▶ Inkjet paper
Economical Optimizers for Alternative Print Processes

NON-IMPACT PRINTING (NIP)
Digital printing has revolutionized printing technology. Non-impact printing (electro-photography) is an innovative branch that has opened up new business fields through print-on-demand technology. Digital printing is ideal for this. Copiers and laser printers are the most cost-effective alternatives to conventional printing methods for print-on-demand tasks or for small to medium print runs. Attention is focused on digital full-color printing. The color is provided by the toner, which therefore has to satisfy the strictest demands. Highest print quality is assured by complex processing and performance additives: specially developed HDK® grades maintain the toner’s high flowability. WACKER® AKF silicone fluids act as release agents preventing toner transfer to the rollers, thus extending the fuser rollers’ operating life. ELASTOSIL® silicone rubbers are used to optimize toner fixing for printer and copier rollers.

Applications
- Printer & copier rollers
- Fuser oils
- Toners

Products
- ELASTOSIL®, HDK®, WACKER® AKF
Paper & Board Coating
Even in the age of electronic communications, there is still no substitute for paper – but it is subject to changing requirements. The fundamentals keep shifting as production and processing become more efficient, environmental awareness grows, new applications are found and new trends move center-stage. High-performance developments and innovative hi-tech products from WACKER’s laboratories and technical centers have led to an extensive range of marketable products. Efficient VINNAPAS® dispersions, together with the POLYVIOL®, and VINNACOAT® series of high-performance binders, provide an optimum basis for economical and environmentally friendly paper finishing and paper and board coating.

Products
POLYVIOL®, VINNACOAT®, VINNAPAS®
Ask the experts: Our paper applications department with its own state-of-the-art laboratory provides optimum services for your paper and board coating processes.
Release Coatings

DEHESIVE® silicone-coated release liners are ideal for almost any pressure-sensitive adhesive application, since they can be tailored to the specific application and offer unbeatable cost-benefit. DEHESIVE® silicones are in a class of their own in regard to their multifunctionality, environmental compatibility and economy – whether for baby diapers or hygiene articles, self-adhesive envelopes or labels, electrical insulating or packaging tape, baking paper or large-format advertising labels, adhesive plasters or webbing, roofing, or pipe and other thermal insulation.

Applications

- Envelopes
- Labels
- Graphic arts
- Industrial applications
- Adhesive tapes
- Medicine/hygiene
- Food/baking

Products

DEHESIVE®

First Choice for Perfect Release Liners

DEHESIVE® product lines bring attractive benefits for the label industry: lower overall costs, high coating speeds and ease of handling. To find out more, see our DEHESIVE® Special at www.wacker.com/dehesive.
Pulp
Sustainability is a need in every branch of industry. Through its PULPSIL® product series of antifoam agents specially tailored to the pulp industry, WACKER supplies highly effective silicone defoamers that make processes smooth and reliable. PULPSIL® defoamers prevent over-foaming – for example, in pulp-washing, during sorting and screening, in the bleaching bath and in wastewater treatment. They improve washing results, cut washing-water and energy consumption, reduce bleaching-chemical demand and consequently permit environmentally optimized pulp production.

Applications

- Defoaming
- Dewatering
- Pulp

Products

- PULPSIL® 823 E, PULPSIL® 850 E etc.
- PULPSIL® 160 C, PULPSIL® 175 C etc.
Filtration

Cars, vacuum cleaners, water purifiers and air conditioning systems are products that improve our quality of life greatly, provided they are equipped with the right filter systems. Modern filter technology in combination with high-performance dispersions guarantees cleaner air and purer water. To make these products more efficient, WACKER supplies key components in the form of VINNAPAS® and VINNOL® dispersions. In air filters for cars and trucks, such products improve e.g. durability as well as flexural and bursting strength; in air conditioning systems and vacuum cleaner bags, they optimize hydrophobic properties that promote the active removal of harmful pollen, particulate matter and dirt; and in filter media for water and food applications, they filter out undesirable solids, improve the quality of the filtrate and simplify the production process. Whether for paper or non-woven media, and whether for spraying, foaming or impregnating, VINNAPAS® and VINNOL® VAE dispersions achieve excellent fiber bonding, with outstanding technological benefits.

Applications
- Liquid filtration
- Air filtration

Products
- VINNAPAS®, VINNOL®

See also: www.wacker.com ➤ Products & Markets ➤ Paper, Films & NIP ➤ Filtration
WACKER is one of the world’s leading and most research-intensive chemical companies. In 2008, its sales totaled € 4.3 billion. Products range from silicones, binders and polymer additives for diverse industrial sectors to bio-engineered pharmaceutical actives and hyperpure silicon for semiconductor and solar applications. As a technology leader focusing on sustainability, WACKER promotes products and ideas that offer a high value-added potential to ensure that current and future generations enjoy a better quality of life based on energy efficiency and protection of the climate and environment.

Spanning the globe via five business divisions, 27 production sites and over 100 subsidiaries and sales offices, we have established a presence in all key economic regions and growth markets. With a 15,900-strong workforce, WACKER sees itself as a reliable innovation partner that develops trailblazing solutions for, and in collaboration with, its customers. WACKER also helps them boost their own success. Our technical centers employ local specialists, who assist customers worldwide in the development of products tailored to regional demands, supporting them during every stage of their complex production processes, if required.

WACKER e-solutions are online services provided via our customer portal and as integrated process solutions. Our customers and business partners thus benefit from comprehensive information and reliable service to enable projects and orders to be handled fast, reliably and highly efficiently. Visit us anywhere, anytime around the world at: www.wacker.com

All figures are for 2008.
WACKER at a glance

WACKER Technical Centers: our worldwide state-of-the-art competence centers focus on finding the best possible solution for your needs. WACKER has 17 technical centers – in Adrian, Akeno, Allentown, Beijing, Burghausen, Dubai, Hikari, Hsinchu, Jandira, Kolkata, Melbourne, Moscow, Nünschitz, Portland, Shanghai, Singapore and Suwon.
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