

WACKER

CREATING TOMORROW'S SOLUTIONS

VINNAPAS®

VINNOL®

NONWOVENS AND TECHNICAL TEXTILES | POLYMER DISPERSIONS

THINK AHEAD IN NONWOVENS
AND TECHNICAL TEXTILES

WACKER BINDERS AND SERVICES COME TO THE NONWOVENS AND TECHNICAL TEXTILES MARKET TO ...

... bind your **renewable** and **reusable fibers**

... enhance your nonwovens with **valuable attributes**

VINNAPAS®

VINNOL®

... **support** you with regional centers for technical assistance, R&D, manufacturing and customer service

BRINGING IDEAS TO LIFE IS OUR PARTICULAR EXPERTISE

Your Technology Lead

WACKER is one of the world's leading suppliers of high-quality binders and polymer additives. WACKER scientists have been working with polymeric binders since the 1950s, and with high-performance vinyl acetate-ethylene (VAE) copolymer dispersions since the mid-1960s. Now, WACKER is the market and technology leader in VAE dispersions with world-class production sites in North America, Europe and Asia.

Your Environmental Advantage

VINNAPAS® and VINNOL® dispersion binders allow for the manufacture of nonwovens from renewable resources. Furthermore, nonwovens made from WACKER binders can be compostable and/or dispersible when constructed properly.

Your Innovative Partner

Markets are constantly changing. Identifying future trends beforehand is one key to success. Knowing how to meet them with market-driven products is another. We have been transforming ideas into innovations for over 20 years, offering customers a threefold advantage: expert people, unique products and technical centers around the globe. These technical centers utilize state-of-the-art equipment and local experts who are at home in your market yet can draw on the experience of other technical centers and research departments in over 25 countries. You thus will reap the benefit of an extensive knowledge base that has been built up over decades.

**Share your ideas with us
and contact us!**



ENHANCE YOUR NONWOVENS AND TECHNICAL TEXTILES

Products such as wipes, napkins, filters or sanitary towels could not exist in their present form without dispersions. They are indispensable starting materials in the production of nonwovens and textiles. Binders with VINNAPAS® VAE dispersion technology offer high performance combined with low-odor, low-VOC and are produced without the use of APEO – our customers only deserve the best.

Textiles and Technical Nonwovens

VINNAPAS® and VINNOL® dispersion binders improve properties such as flame retardancy, dimensional stability, abrasion resistance and wash resistance. The dispersions' compatibility with one another and with conventional nonwovens and textile additives ensures wide scope in adjusting the property profile. Nonwovens and textiles coated with VINNOL® ethylene-vinyl chloride copolymer dispersions can be readily heat sealed and HF welded, and feature high-chemical resistance. In technical nonwovens VINNOL® dispersions improve the tensile strength, stiffness and pleatability that are important for filters.

Consumer Nonwovens

VINNAPAS® dispersions for consumer nonwovens are characterized by their versatility. They provide nonwovens with outstanding properties, such as excellent wet and dry strength, pleasant touch, dimensional stability, absorbency or solvent resistance, and thereby ensure optimum results in many applications.

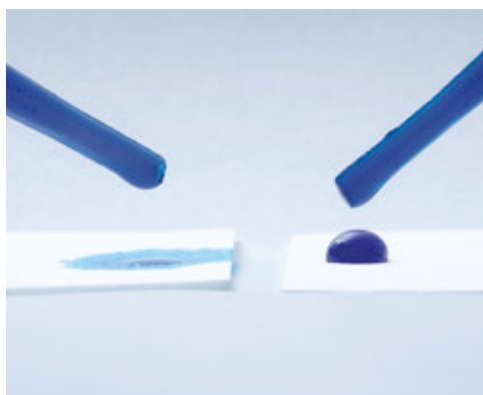
They are extremely safe in skin and food contact and are therefore the preferred binder for various utility articles, such as table tops, moist wipes and personal hygiene products. VINNAPAS® dispersions can be applied to nonwovens by all widely used processes (e.g. impregnation, spraying, foam) and provide end users with a wide range of benefits.



IMPROVE YOUR PERFORMANCE THROUGH TECHNICAL SUPPORT



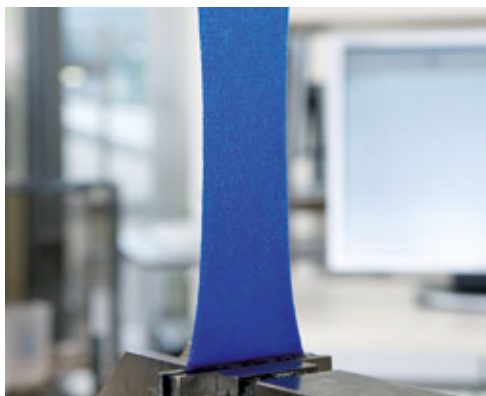
Flame retardancy



Controlled absorbency



Variable hand



Wet and dry tensile strength

Benefit from a Broad Range of Valuable Attributes

- Flame retardancy
- Variable hand
- Controlled absorbency
- Wet and dry tensile strength
- Bulky, lofty to dense
- Disposable/dispersible to durable

- Heat-sealable/ HF-weldable to blockfree
- High-temperature resistance
- Low-temperature flexibility
- Weather resistance (UV, humidity, fouling)
- Breathability, absorbency
- Drape

Benefit from Extensive Service

At our state-of-the-art technical centers, we support you by developing formulations for new products or optimizing the performance parameters of your existing products. Our experts assist you in all phases of your manufacturing processes – from analytic tests in our laboratories to hands-on support in your production site.

Our services include:

- Advice on technical and chemical issues
- Customized formulations for your plants and applications
- Support for product developments
- Testing products on pilot airlaid lines in the USA and Europe
- Advice on increasing productivity and cutting costs
- Analytical lab work
- Individual warehousing and logistics solutions
- E-business solutions

- Food contact compliance
- Abrasion resistance
- Dry tensile strength
- Wash resistance
- Dimensional stability
- Discoloration resistance
- Solvent resistance

APPLICATIONS AND PROPERTIES AT A GLANCE



Filtration



Vertical blinds



Feminine hygiene



Wet wipes



Wall coverings



Table top

Filtration

- Pleatability
- Wet tensile strength
- Burst strength

Wet Wipes

- Wet tensile strength
- Dispersibility
- Absorbency
- Soft hand feel

Vertical Blinds

- Flame retardancy
- Abrasion resistance
- Heat sealable
- Firm hand

Wall Coverings

- Color fastness
- Dry tensile strength
- Dimensional stability
- Abrasion resistance

Feminine Hygiene

- Absorbency
- Dust control

Table Top

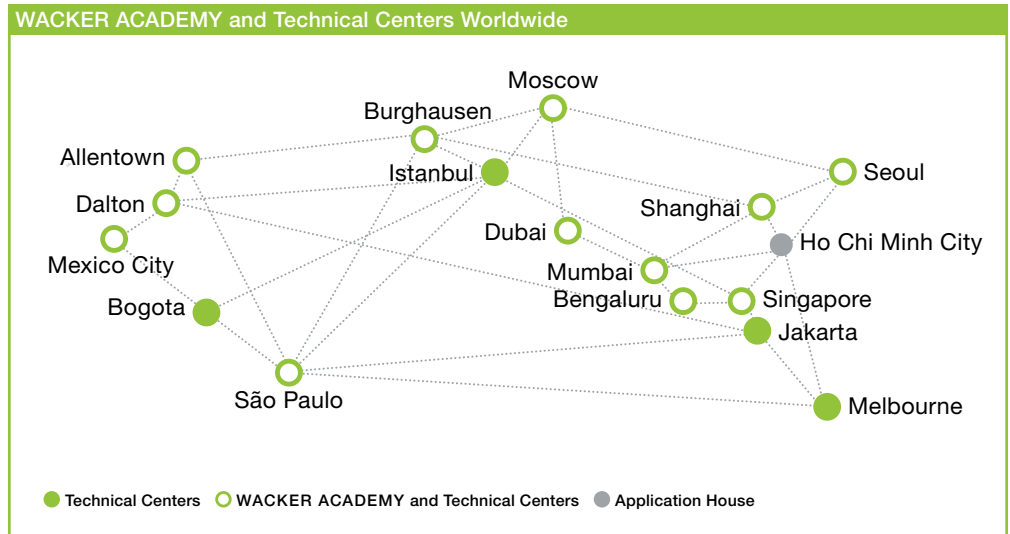
- Drape
- Soft hand feel
- Absorbency
- Food contact compliance
- Printability

YOUR GLOBAL PARTNER WITH LOCAL SUPPORT

WACKER offers you a local presence worldwide. You have at your disposal, across five continents, the knowledge of local experts, who are in turn supported by a global network. You will gain advantages such as our unique expertise, acquired in a broad spectrum of applications and markets over the course of 75 years.

With WACKER, You are Supported by:

- Regional centers for technical support
- R&D – on three continents
- Production sites in Cologne, Burghausen, Calvert City, Nanjing, Ulsan
- Customer service – dedicated team for each customer





WACKER

Wacker Chemie AG
Hanns-Seidel-Platz 4
81737 Munich, Germany
www.wacker.com/contact

www.wacker.com

Follow us on:



Wacker Chemical Corporation
Allentown, USA
Tel. +1 610 336 - 2700

**Wacker Chemicals
(China) Co., Ltd.**
Shanghai, China
Tel. +86 21 6130 - 2000

Wacker Chemicals Korea Inc.
WACKER Seoul
Seongnam-si, South Korea
Tel. +82 31 697-7200

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