

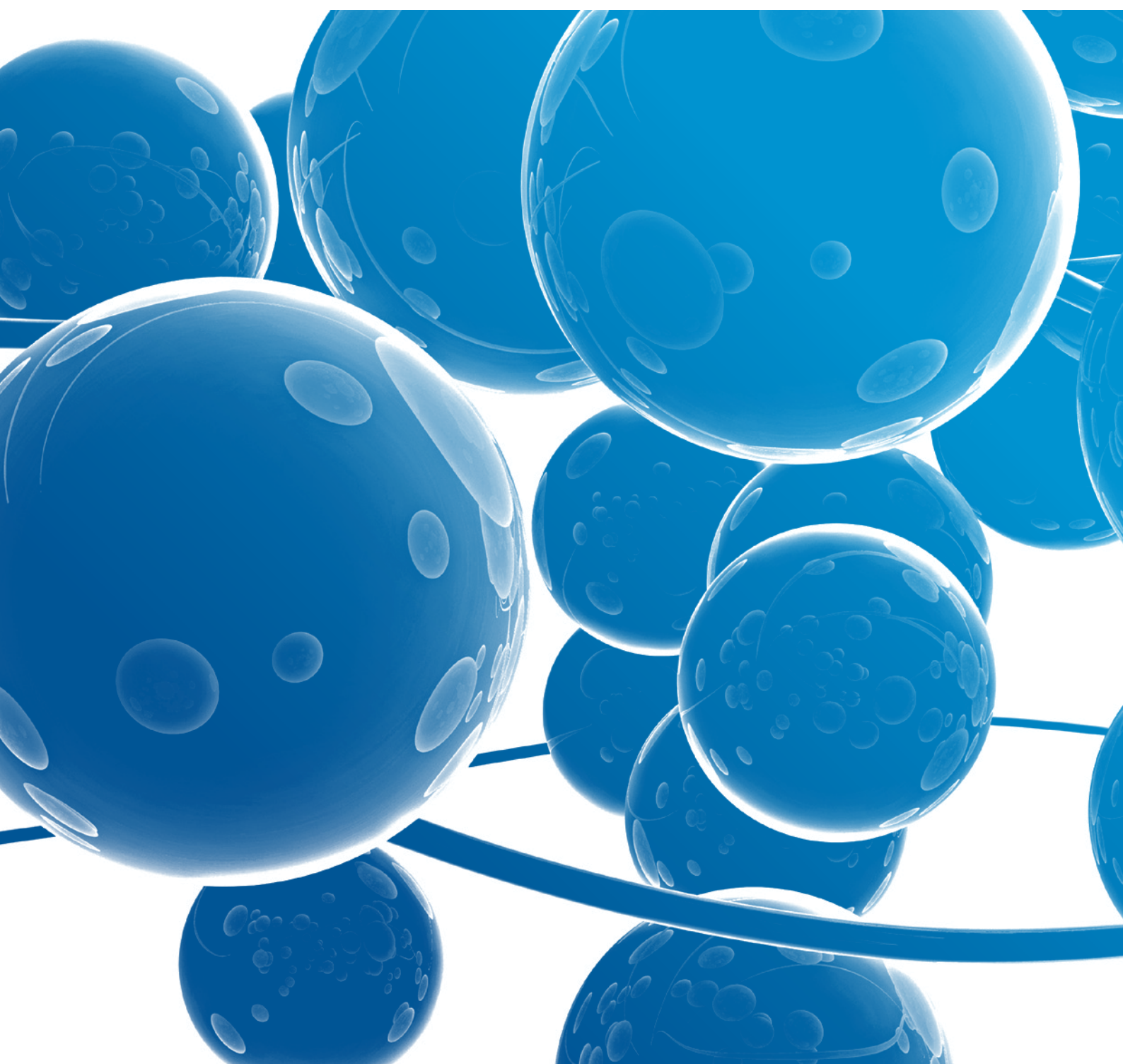
Bindzil and Levasil product guide

Colloidal silica dispersions – functions and applications



AkzoNobel

Tomorrow's Answers Today



Applications for Bindzil and Levasil

We market and sell waterborne colloidal silica dispersions designed and developed for a variety of application areas.

Consistent, global quality

Our Bindzil and Levasil products are produced in our global network of manufacturing facilities according to our global quality standards. These standards make it possible for us to meet and exceed our customers' needs and expectations. We are certified according to the ISO 9000 and ISO 14000 standards globally.

Safety, health and environment

Concern for safety, health and the environment is an integral part of our business policy. We are committed to continuous improvement in safety and health worldwide.

Product and application

Our team has been involved in the research and development of colloidal silica dispersions for more than 80 years. We have been developing our Bindzil and Levasil colloidal silica dispersions and their applications for the last 30 years. We focus on our current and future needs, which is reflected by our corporate identity Tomorrow's Answers Today™.

Further information

For more information or assistance with Bindzil and Levasil products, applications, or samples, email us at: colloidalsilica@akzonobel.com, contact one of our local offices, or visit us on the web at <http://www.colloidalsilica.com>. You can also refer to our individual product and application guides.

Function

Application

Recommendations

Binding



- Ceramics
- Catalyst carrier
- Foundry
- Catalyst
- Refractory

Levasil 100/45
Bindzil 30/310
Bindzil 830
Bindzil 40 NH3/130
Bindzil 1440

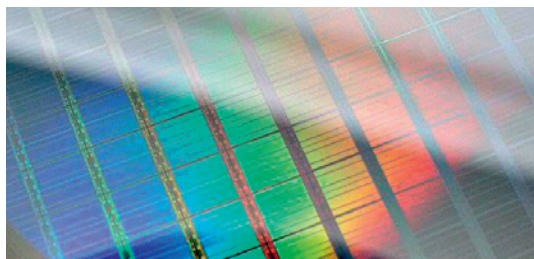
Flocculation



- Wine
- Must and juices
- Ceramic fiber

Bevasil 30
Levasil 200/30 FG
Bindzil 1440

Polishing



- Silicon wafers
- Other substrates

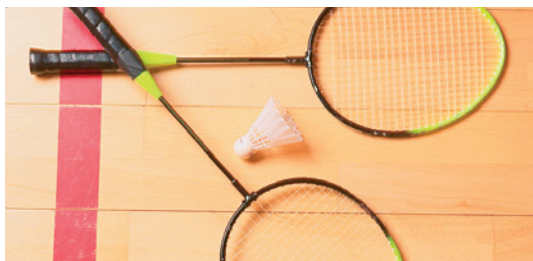
Levasil 200/30 WALM
Levasil 50/50

Function

Application

Recommendations

Abrasion



- Paints
- Lacquers
- Non-stick coatings

Levasil 300/30
Bindzil CC301
Bindzil 2034DI

Frictionizing



- Paper packaging
- Textiles
- Floor wax and polishes

Bindzil 50/80
Levasil 100/45
Levasil 300/30

Antiblocking



- Metal coating
- Plastic films
- Polymer emulsions

Levasil 200E/20
Bindzil 40/170
Levasil 200/40

Printability



- Printing
- Ink Jet
- Textiles

Levasil 300/30
Bindzil CAT80
Levasil 200S/30

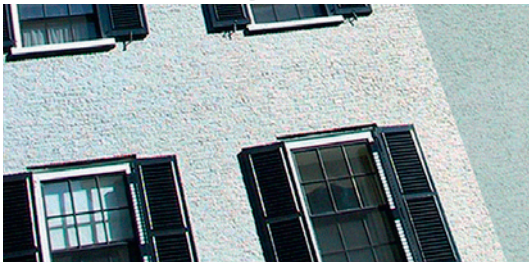
Bindzil and Levasil products are utilized in the coating, steel & metal, refinery, refractory, electronic and beverage industries.

Function

Application

Recommendations

Anti-soiling



- Cleaners
- Surface treatment

Bindzil CC301
Bindzil 30/360

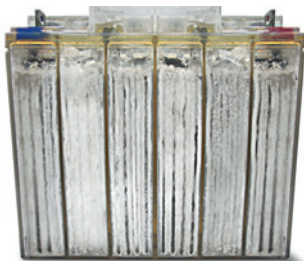
Dispersing



- Pigments
- Inks
- Minerals

Bindzil CC151 HS
Bindzil CC301
Bindzil 50/80

Gelling



- Battery
- Soil consolidation

Bindzil GB3000
Bindzil 15/750 LS

Strength and stability



- Concrete
- Cement grouts

Cembinder 8
Cembinder 50

Our five types of colloidal silica

Facts about colloidal silica

- Aqueous silica dispersions
- A variety of product surface areas (30–1000 m²/g), particle sizes (5–100 nm), and particle size distributions are available
- Stabilizing ions, surface treatments, and pH adjustments designed for your applications
- Commitment to global quality standards
- Non-classified chemicals

Our colloidal silica dispersions are available for bulk deliveries or package deliveries in IBCs or plastic drums.

For maximum shelf life, our colloidal silica dispersions should be stored between 5 and 35 °C. If exposed to freezing temperatures, colloidal silica dispersions will irreversibly precipitate.

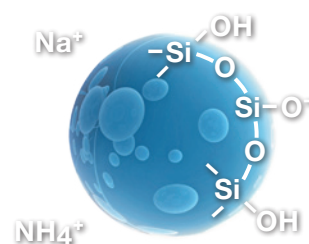
Colloidal silica dispersions are best stored in dark, closed tanks made of non-rusting materials like plastic or coated steel. Uncoated, metallic tanks or piping should be avoided.

As with any chemical, consult the corresponding Material Safety Data Sheet for health, safety and environmental information prior to handling.

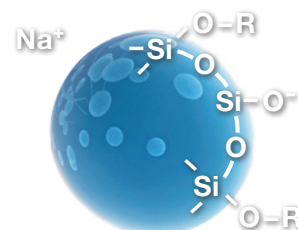
Further information

For more detailed product information, please refer to our product guide. For samples, technical service and further information, please contact your nearest office, visit our website at www.colloidsilica.com, or send an e-mail to colloidsilica@akzonobel.com

- Anionic particles
- Sodium or ammonia stabilized
- Dispersed in water
- pH 8–11



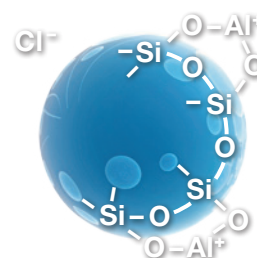
- Anionic particles
- Silane modified
- Sodium stabilized
- Dispersed in water
- pH 7–9



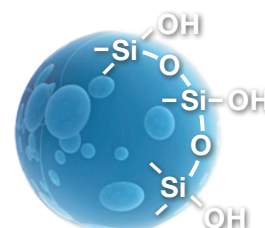
- Anionic particles
- Aluminate modified
- Sodium stabilized
- Dispersed in water
- pH 5–11



- Cationic particles
- Chloride stabilized
- Dispersed in water
- pH 2–5



- Non-charged particles
- Deionized modified
- Electrolyte free
- pH 2–4



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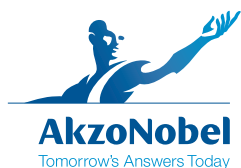
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www.akzonobel.com/colloidalsilica

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