



THE POWER OF NANO

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TEAM OF EXPERTS IN NANOTEC BUSINESS



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WE OFFER DEVELOPMENT AND PRODUCTION SERVICES

nanoSaar AG

- Strategy & Corporate Development
- Customer / Partner Relations
- Finance & Legal / IP

nanoSaar Lab GmbH

- Research & Development
- Products and Processes

nanoSaar Production GmbH

- Technology Upscaling
- Production

LEADING PROVIDER OF SUSTAINABLE SOLUTIONS

Lower
Process /
Storage
Cost



Improved
Functionalities



Improved
Waste Management



Higher
Environmental
Safety



WE CREATE SOLUTIONS FOR OUR PARTNERS

Partner / Market



Formulation Platform

Technology Platform

Production Platform

NEW FORMULATIONS FOR OUR PARTNERS

Precipitation Seeds

- TiO_2
- $\text{Al}(\text{OH})_3$
- ZrO_2

Corrosion Protection

- $\text{Zn}_3(\text{PO}_4)_2$
- $\text{Ca}_3(\text{PO}_4)_3$
- $\text{Ba}_3(\text{PO}_4)_3$

Paints & Coatings

- BaSO_4
- CaCO_3
- Wax
- SiO_2

Biocides

- $\text{Zn}(\text{OH})_2(\text{CO}_3)$
- Tebuconazole
- ZnMoO_4
- Ag NP

Concrete

- CSH
- $\text{Ca}(\text{OH})_2$
- BaSO_4
- Wax

Fillers

- BaSO_4
- $\text{Co}(\text{OH})_2$
- ZrO_2
- CaCO_3

Flame Retardants

- $\text{Mg}(\text{OH})_2$
- THPC
- $\text{Al}(\text{OH})_3$

Crop Science

- Metamitron
- DFF / IFT
- Fluopyram

Medical Applications

- BaSO_4
- $\text{Zn}_3(\text{PO}_4)_2$

Diagnostics/Magnetic

- FeO_x SPION
- FeO_x
- SiO_2

Catalyzers

- CaCO_3

Miscellaneous

- SiO_2
- Polymerisation

FOCUS ON CONTINUOUS FLOW TECHNOLOGIES

MicroJetReactor MJR®



Split-and-Recombine SAR



LAB DEVICES FOR PRODUCT DEVELOPMENT



- Output of up to 30 liters per hour
- Versatile unit: used for precipitation, emulsification and encapsulation tasks in R&D phase
- Micro gear pumps with high-precision flow rates



- Maximum output of 80 liters per hour
- High-pressure applications of up to 210 bar
- Homogeneous thermal control up to 250° C
- Thermally supported chemical processes, melting processes, matrix encapsulations, and emulsifications



- Minimum dosage (10 ml/min)
- High dosage exactness
- Multiple use in pharma precipitations
- Split-and-Recombine principle

FROM SCALE-UP TO LARGE-SCALE PRODUCTION

Scale-Up Device



- Highly flexible upscaling device
- Siemens-based control software ensures full compatibility with existing production environment
- Highly adjustable for a wide range of industrial, cosmetic and nutritional applications

Production Machine



- Maximum throughput of 600 liters per hour (easily scalable by parallelization)
- Siemens-based control software ensures full compatibility with existing production environment
- Highly adjustable for a wide range of industrial, cosmetic and nutritional applications

SOLUTIONS BECOME PRODUCTS



Paints & Coatings
Pigment stabilizing additive



Concrete acceleration
Concrete additive for higher
compression strengths



Nanoscaled biocides
for controlled release and
reduced environmental stress



Wax dispersion
Additives for a variety of
protective and decorative
coating applications

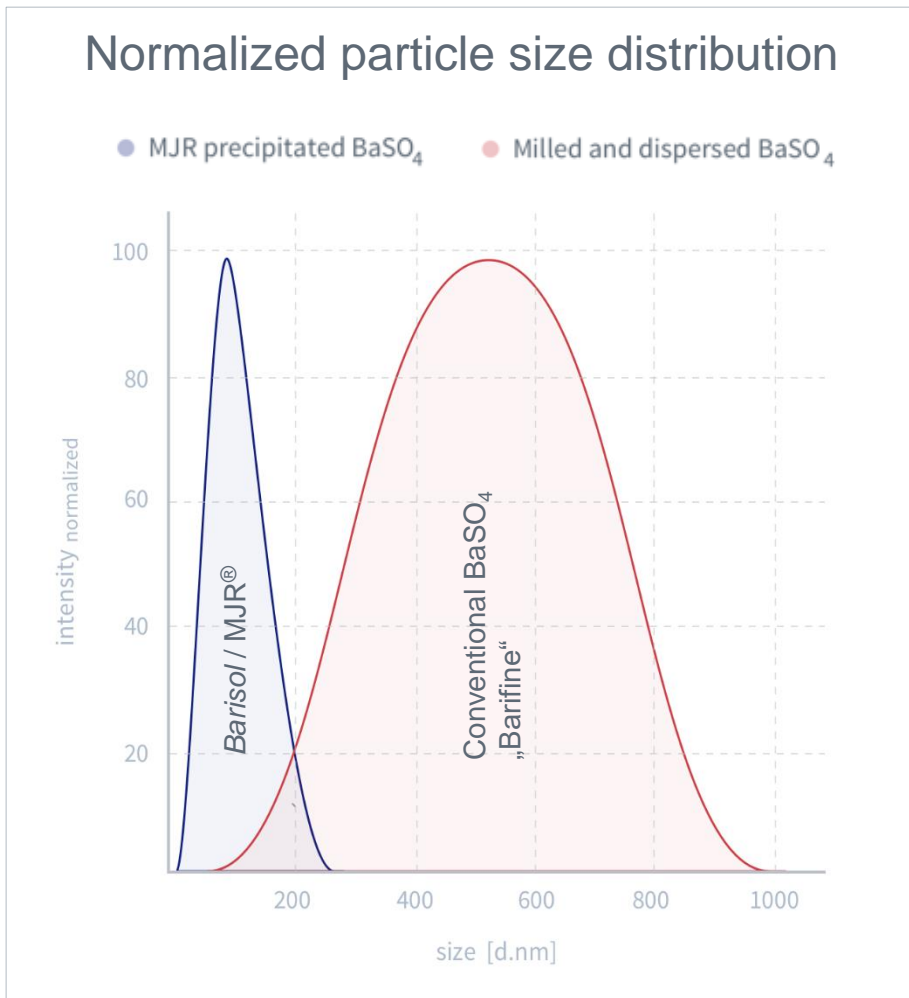


**Non-conductive
coating additive**
Electrically isolated
pigments
for coatings



**Fungicidal
seed protection**
Seed treatment dispersion

DISRUPTIVE ADDITIVE FOR PAINTS & COATINGS



Business Case Barisol

- Use of solid particles as spacers
- Application versatility
- Overall cost reduction up to 50 %
- Reduction of Microplastics
- IP protestier



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