

# Neuburg Siliceous Earth - Unique Raw Material

Neuburg Siliceous Earth is unique in the world. Until today, deposits of this mineral have only been found near Neuburg on the Danube in Bavaria. The next pages will tell how Neuburg Siliceous Earth can be useful in Coatings Systems.

## Sillitin and Sillikolloid:

### Coatings Application:

Neuburg Siliceous Earth (Sillitin and Sillikolloid) is a natural combination of corpuscular, crypto-crystalline and amorphous silica and lamellar kaolinite: a loose mixture impossible to separate by physical methods. As a result of natural formation, the silica portion exhibits a round grain shape. This characteristic is at the origin of further benefits of Neuburg Siliceous Earth for applications in coatings.

### Benefits in Coating Systems:

Filler Properties	Effect
Loose structure, small particle size	Easily and rapidly incorporation, excellent dispersion properties (especially puriss products), very low sedimentation, no hard sediment, good rheological properties (shear thinning, thixotropic), matting effect, → very fast drying, water vapor permeability, good pigment dispersion (spacer effect), good edge covering, good sanding, excellent stone-chipping resistance, good mechanical properties, good corrosion protection
Non-ground filler, low grit content	→ Low abrasivity
Very low electrical conductivity (< 100 µS/cm)	→ No disturbing electrolytes, good bath stability in electrophoretic applications
No buffer effect	→ Good stability in water-based coating systems
Mineralogical composition (hardness)	→ Scratch resistance, abrasion resistance
Chemically inert	→ Weather and chemical resistance, especially against acids
Refraction index similar to binder	→ Very good transparency (for clear coats)
Surface treatment possible	→ Good bonding properties with polymer
High Purity	→ Also suitable for food contact in compliance with BfR and FDA regulations

# CALCINED NEUBURG SILICEOUS EARTH

## SILFIT AND AKTIFIT

The next pages will tell you how we - Hoffmann Mineral - are producing from the unique Neuburg Siliceous Earth the calcined products Silfit and Aktifit.

In addition, you can get a summary of our calcined product range and the properties of the individual grades. In order to enable you to always have available the most important information about our calcined products, we offer material specifications and safety data sheets for downloading. If you become interested in our products, you will find further information about ordering, packaging and shipping modes under "Packaging and Supply".

## Benefits in Coating Systems

Filler Properties	Effect
Low moisture, low moisture absorption	➔ Also suitable for moisture-curing systems, good storage stability
Very high brightness and color neutrality	➔ For white products without yellowness, increase in hiding power or reduction of pigment content
Very good dispersion properties	➔ Quick and easy coating production
Reduced interaction of filler particles	➔ Often lower viscosity, improved leveling

## Application Possibilities:

- [Electrophoretic](#)
- [Coatings](#)
- [Primer-surfacer](#)
- [Anti-corrosive Coatings](#)
- [Powder Coatings](#)
- [UV-curing Clear Coatings](#)
- [Clear Wood Coatings](#)
- [Ventilation Primers](#)
- [Soft-feel Coatings](#)
- [Plastic Primers](#)
- [Solder Resist](#)
- [InksRoad](#)
- [Marking Paints](#)
- [Façade and Diffusible Dispersion](#)
- [PaintsDispersion](#)
- [Coatings for Concrete](#)
- [Artists' Paints](#)