



Finma-Sil SND

Description

Finma-Sil SND is a water-based zinc stearate paste with a 43% solids content. It has been specially developed for use in water-based coating systems to improve sandability and minimize foaming during incorporation.

Application Area

Zinc stearate is used, for example, in wood coatings, as it significantly improves sanding properties; this also applies, of course, to other coating systems. Finma-Sil SND allows the use of zinc stearate in water-based coating systems. Until now, this has been a problem due to the hydrophobic properties of zinc stearate, especially regarding to foam formation and dispersing fineness.

Specification

Solid content	43 ± 3 %
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Typical properties

general information, not part of the specification

Viscosity	4500 mPas ± 1100 mPas
Appearance	free flowing pumpable white paste
Dispersing fineness	≤ 20 µm

Application example

To demonstrate the improved grindability, an water-based acrylic polyurethane binder was mixed with 10% Finma-Sil SND compared to a 0-sample. For this purpose, a Crockmeter with constant contact pressure and defined sandpaper diameter was used.

Two tests were carried out, each with three repetitions. In the first test, 240 grain machine sandpaper, at 2N contact pressure and 40 cycles. In the second test, 240 grain hand sandpaper was used, at 6N contact pressure and 150 cycles.



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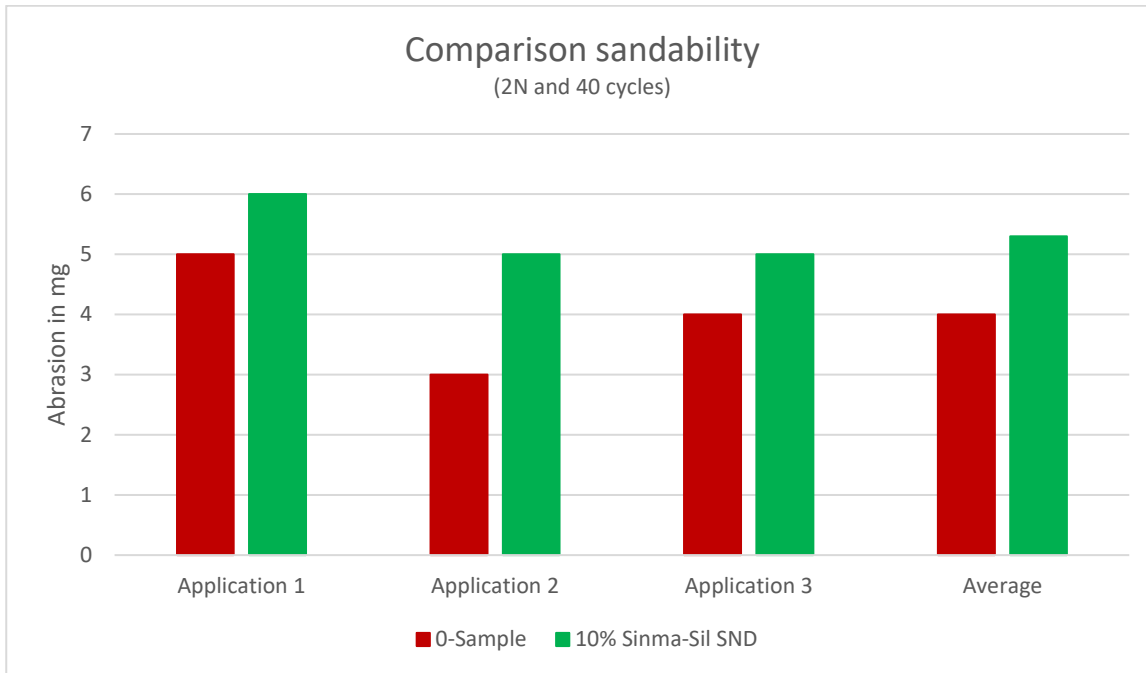


Figure 1: Graphical illustration of abrasion by machine sandpaper (240 grain) in the Crockmeter with 2N contact pressure and 40 cycles. Red: Coating system without Finma-Sil SND, Green: Coating system with 10% Finma-Sil SND.

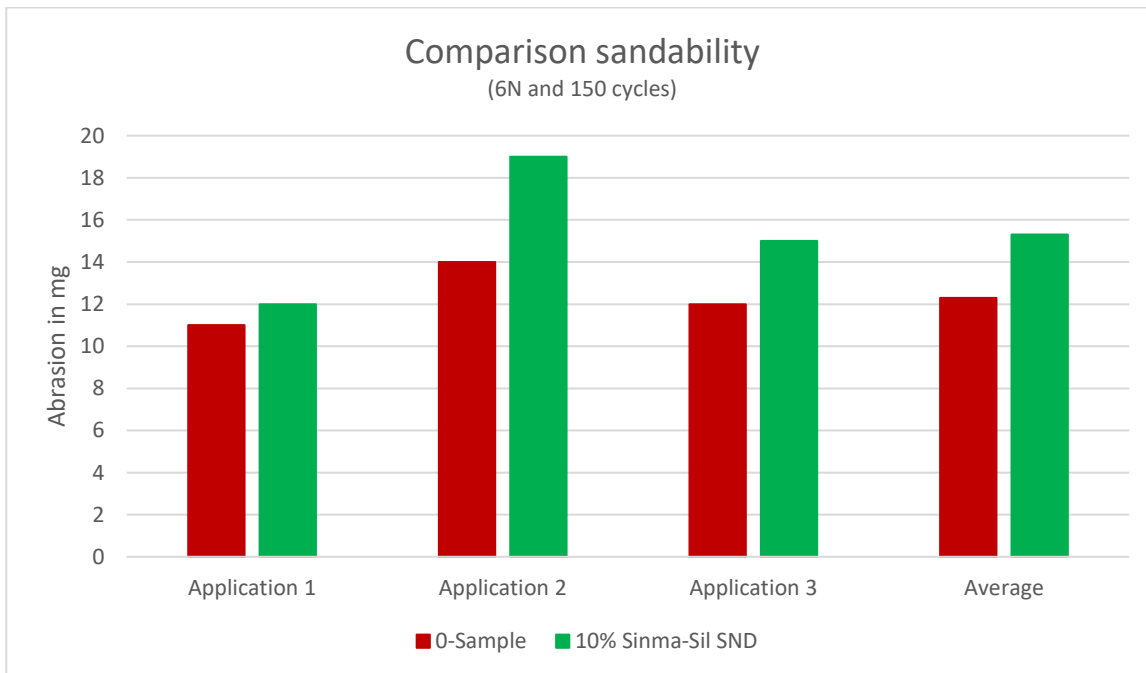


Figure 2: Graphical illustration of abrasion by hand sandpaper (240 grain) in the Crockmeter with 6N contact pressure and 150 cycles. Red: Coating system without Finma-Sil SND, Green: Coating system with 10% Finma-Sil SND.

The results show a significant improvement in sandability by using Finma-Sil SND. In test 1, the sandability was improved by 20% and in test 2 by 16.3%.





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The following figures show the reduced foaming when incorporated into an aqueous coating system, of Finma-Sil SND compared to a zinc stearate powder.



Figure 3: Comparison of foam formation after incorporation into a water-based binder, of Zn-stearate using a dissolver without vacuum (left: Zn-stearate powder; right: Zn-stearate paste).

Figure 4: Comparison of foam formation after incorporation into a water-based binder, of Zn-stearate using a dissolver without vacuum (left: Zn-stearate powder; right: Zn-stearate paste).

Figure 5: Comparison of foam formation after incorporation into a water-based binder after one day of waiting, of Zn-stearate using a dissolver without vacuum (left: Zn-stearate powder; right: Zn-stearate paste).

Advantages

Other advantages of using Finma-Sil SND are:

- Allows easy use of zinc stearate in waterborne coating systems.
- Easy handling due to pumpability and free flowing properties.
- Increased occupational safety by eliminating dust explosions and inhalation.
- Lower costs, due to less frequent change of sandpaper.
- Improvement of the optical sanding result

Packaging

Packaging unit

25 kg plastic drum
100 kg plastic drum
1000 kg container (IBC)

Storage

In original sealed containers at low relative humidity and protected from freezing. Always keep the containers closed. The storage period of six months after shipment should not be exceeded.

It is recommended to homogenize by stirring before use.

This datasheet should advise technically. It is not binding and does not claim to be complete.

The above data do not represent a characteristic warranty. The customer is not freed by this product information from his obligation to the examination on suitability for the intended purposes and procedures. Same applies to the inspection of incoming goods at the customer.

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