



# Applications of Neuburg Siliceous Earth in Coatings and Related Systems

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We supply material for good ideas





# Contents

## CONTENTS

COATINGS

COATINGS related

NEW APPLICATIONS

## 1. Coatings

## 2. Coatings related

## 3. New Applications





# Electro Deposition Paints

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**Cataphoretic as well as Anaphoretic**

**Important Features:**

- small particle size
- excellent dispersibility
- very low electrical conductivity
- no disturbing electrolytes, esp.  $\text{Cl}^-$
- **low sedimentation tendency**
- **good pigment paste and bath stability**
- good throwing power
- good corrosion protection
- **good flexibility (Erichsen cupping and impact test)**



**Recommended Products:**

- Sillitin Z 86
- Sillitin Z 89
- Sillikolloid P 87
- Aktisil PF 777

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



# Primer-Surfacers

OEM, Refinish, Solvent based, Water-borne

## Important Features:



- small particle size
- excellent dispersibility
- **good sanding / low visibility of sanding marks**
- good corrosion protection
- improved appearance of base / top coat
- **excellent stone-chipping resistance (especially Aktisil AM)**
- gloss (especially Aktisil AM)

## Recommended Products:

- **Sillitin Z 86 / Z 89**
- Sillikolloid P 87
- **Sillikolloid P 87 puriss**
- **Aktisil AM (esp. OEM water based)**

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



# Adhesion-Primers for Plastic

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CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS

## Important Features:



- low sedimentation tendency
- **balanced rheology with low run off tendency**
- low abrasivity
- good adhesion

## Recommended Products:

- Sillitin Z 86
- Aktisil PF 777





CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



# Anti-Corrosion Coatings

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Epoxy, Polyaspartic, PUR etc.

## Important Features:



- excellent dispersibility
- low sedimentation tendency
- favorable rheological properties
- low abrasivity
- good weather resistance
- **good corrosion protection, especially reduced delamination at scribe**
- **good chemical resistance, especially against acids (Aktisil AM, Aktisil PF 777)**
- excellent abrasion resistance

## Recommended Products:

- Sillitin Z 86 / Z 89
- Aktisil PF 777
- Aktisil AM
- Aktisil EM



# Powder Coatings

## Functional Epoxy i.e. for Pipelines

### Important Features:



- excellent dispersibility
- low abrasivity
- good fluidizability of powder
- good balance between run off tendency and leveling
- abrasion resistance
- **good corrosion protection, especially reduced delamination at scribe**
- **good flexibility (Erichsen cupping and impact test)**
- **good chemical resistance, especially against hot water**

### Recommended Products:

- Sillitin N 82
- **Sillitin Z 86**
- Sillitin Z 89
- **Aktisil AM**
- **Aktisil MM**

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



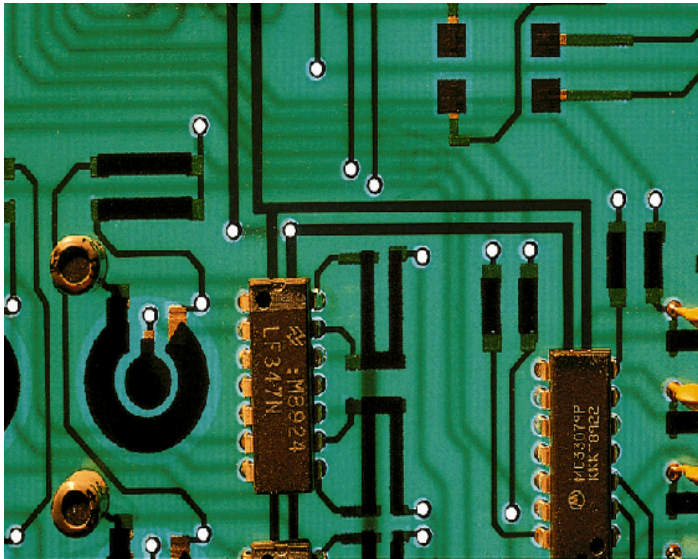
CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS

## Important Features:



## Recommended Products:

- Excellent dispersibility
  - low sedimentation tendency
  - good transparency
  - **balanced rheology**
  - **good edge covering**
  - no effect on UV-curing
- 
- Sillitin V 85
  - **Sillitin Z 89 puriss**
  - **Sillikolloid P 87 puriss**
  - **Aktisil MAM**
  - Aktisil VM 56
  - Aktisil EM



# UV-Curing Coatings

## Wood-, Parquet-, Foil Varnishes

### Important Features:



- low sedimentation tendency
- adjustable rheology via product type
- no hard sediment
- low abrasivity
- scratch resistance
- **abrasion resistance**
- very good transparency
- **matting effect**
- no effect on UV-curing

### Recommended Products:

- **Sillitin V 85 / V 88**
- **Sillitin Z 86 / Z 89**
- **Aktisil MAM-R / MAM**
- Aktisil VM 56

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



# Wood Coating, Exterior

**Alkyd, low gloss,  
i.e. Window Frames, Barge Boards, Garden Furniture**

## **Important Features:**

- excellent dispersibility
- low sedimentation tendency
- balanced rheology
- no hard sediment
- abrasion resistance
- **matting effect**
- **moisture vapor permeability**



## **Recommended Products:**

- **Sillitin Z 89 puriss**
- **Sillitin Z 86 puriss**
- Sillitin Z 89
- Sillitin Z 86

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS

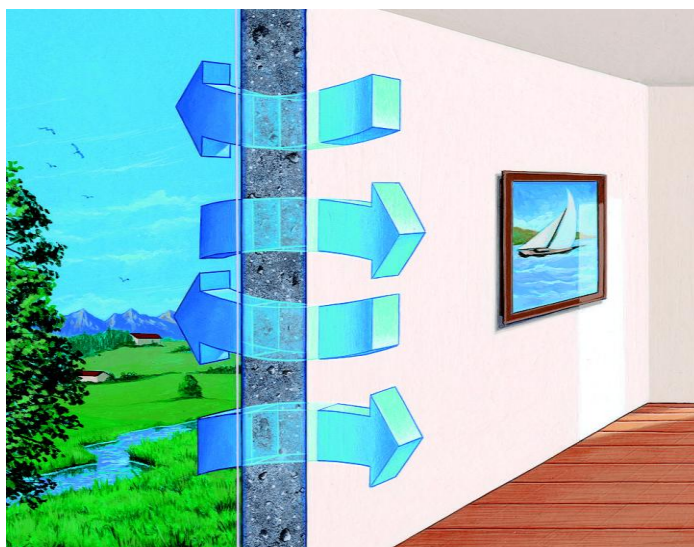


# Facade Paints

## or Specialty Dispersion Paints

### Important Features:

- excellent dispersibility
- low sedimentation tendency
- good abrasion resistance
- good weather resistance
- matting effect
- improved hiding power (opacity)
- **moisture vapor permeability**



### Recommended Products:

- Sillitin V 88
- Sillitin Z 89
- Aktisil MAM

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS

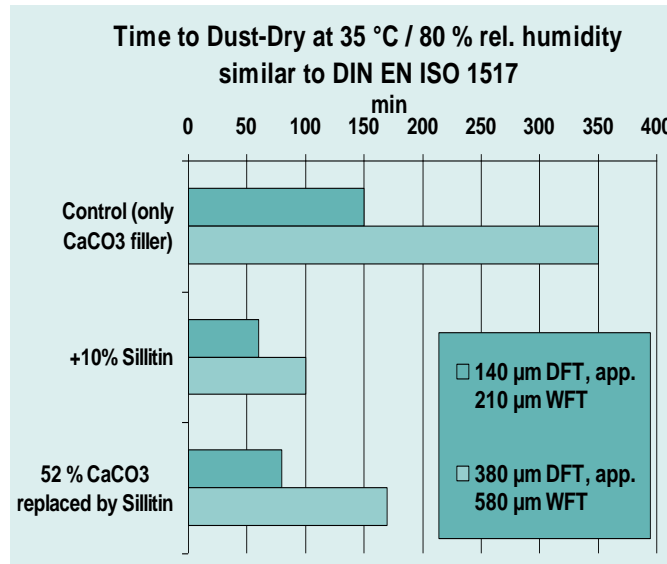


# Concrete Coating

## Acrylate Dispersion (Water-borne), High Film Thickness

### Important Features:

- balanced rheology
- **fast drying, even in humid climate**
- abrasion resistance



### Recommended Products:

- Aktisil MAM / MAM-R
- Sillitin V 85 / V 88
- Sillitin Z 86 / Z 89

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS





CONTENTS  
[COATINGS](#)  
COATINGS  
RELATED  
NEW APPLICATIONS

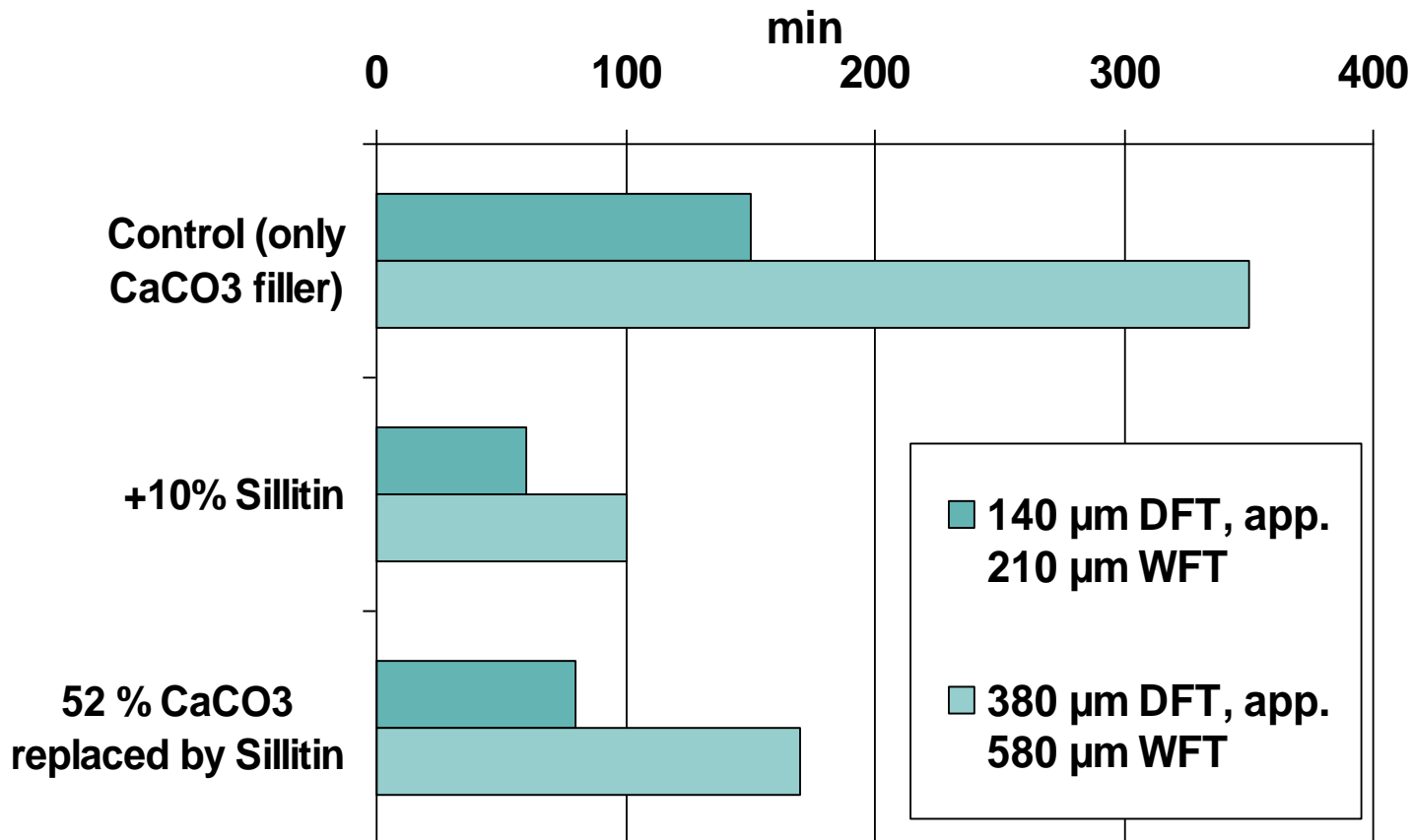


# Concrete Coating

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**Acrylate Dispersion (Water-borne), High Film Thickness**

**Time to Dust-Dry at 35 °C / 80 % rel. humidity  
similar to DIN EN ISO 1517**





# Soft-Feel Lacquers

Solvent Based, Water-borne

## Important Features:

- low sedimentation tendency
- **matting effect**
- **supports soft feel effect**
- chemical resistance
- abrasion resistance



## Recommended Products:

- **Sillitin V 85 / V 88**
- **Sillitin Z 86 / Z 89**
- Aktisil AM
- Aktisil EM
- Aktisil PF 777

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS





- CONTENTS
- COATINGS
- COATINGS RELATED
- NEW APPLICATIONS



# Road Marking Paints

## Important Features:



- low sedimentation tendency
- **fast drying**
- **improved hiding power (opacity)**
- abrasion resistance
- night visibility

## Recommended Products:

- Sillitin V 88
- Sillitin Z 89



## 2 C Polyurethane Systems

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**Sports Floorings, Coatings, Gaskets, Adhesives, Tools...**

### Important Features:



- adjustable rheology via product type (pourable or non sagging)
- ease of processing
- good mechanical properties
  - tensile strength
  - tear resistance
  - resilience / compression-set
  - abrasion resistance
- high chemical resistance, especially acids
- suitable also for food- and potable water contact (complies with BfR and FDA)

### Recommended Products:

- **Sillitin Z 86 / Z 89**
- **Sillitin Z 86 puriss/ Z 89 puriss**
- **Sillikolloid P 87 puriss**
- Aktisil PF 777
- Aktisil AM

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



# Industrial Floorings

## Self Leveling, 2 C Epoxy

### Important Features:



- **good processing properties, even with reduced additives**
  - self-leveling
  - deaeration
  - pigment stability
  - appearance of crossover area
- **improved mechanical properties and chemical resistance via reduction of additives**
  - tensile and
  - compressive strength
  - tensile modulus
  - abrasion resistance
- suitable also for food- and potable water contact (complies with BfR and FDA)
- **Sillitin Z 86**
- **Sillitin Z 86 puriss / Z 89 puriss**
- **Aktisil EM**

### Recommended Products:

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



# Gel Coats

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS

## Important Features:



- **Excellent dispersibility**
- supports pigment distribution (spacer effect)
- low sedimentation tendency
- **balanced rheology (good deaeration / anti sagging)**
- good weather resistance
- good flexibility
- abrasion resistance

## Recommended Products:

- **Sillitin Z 86 puriss**
- **Sillitin Z 89 puriss**
- Aktisil MAM-R / MAM
- Aktisil VM 56
- Aktisil PF 777



# Sealants and Membranes

## 2 C Polyurethane, Pourable, non Sagging

### Important Features:



- adjustable rheology via product type (pourable or non sagging)
- good mechanical properties (high strength)
- high chemical resistance
- suitable also for food- and potable water contact (complies with BfR and FDA)

### Recommended Products:

- Sillitin Z 86
- Sillitin Z 86 puriss
- Aktisil PF 777
- Aktisil AM

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



# Joint-fillings, Coatings and Membranes

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS

**Waterglass-, Furane-, Epoxy-, Vinyl ester-, Polyurethane-based**

## **Important Features:**



- adjustable rheology via product type (pourable or non sagging)
- ease of processing
- good mechanical properties (high strength)
- **high chemical resistance**
- suitable also for food- and potable water contact (complies with BfR and FDA)

## **Recommended Products:**

- **Sillitin Z 86**
- Sillitin Z 86 puriss
- Aktisil PF 777
- Aktisil AM



# New Application

## Adhesive for Rotor Blades of Wind Turbines, Epoxy-based

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



### Important Features:

- low sedimentation
- rheology / thixotropy
- **high lap shear strength**

### Recommended Products:

- **Sillitin Z 86**
- **Sillitin Z 86 puriss**
- **Aktisil PF 777**
- Aktisil AM
- Aktisil EM



# New Application

## Adhesive for Paper i.e. Envelopes, Vinyl Acetate-Dispersion

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



### Important Features:

- low sedimentation tendency
- bond strength

### Recommended Products:

- Sillitin Z 89
- Sillitin Z 86



# New Application

## Adhesive Tapes, Elastomer or Acrylate based

CONTENTS

COATINGS

COATINGS  
RELATED

NEW APPLICATIONS



### Important Features:

- high bond strength via increased cohesion
- bond strength at higher temperatures

### Recommended Products:

- Sillitin Z 86
- Aktisil AM
- Aktisil VM 56
- Aktisil PF 216





- CONTENTS
- COATINGS
- COATINGS RELATED
- NEW APPLICATIONS



# New Application

## Parquet Adhesive, MS- or Hybrid (SPU, SMP)- Polymer



### Important Features:

- adjustable rheology via rheology additive (free flowing to non sagging)
- excellent high strength properties, up to 2 or 3 fold of  $\text{CaCO}_3$  (tensile and lap shear)
- high chemical resistance

### Recommended Products:

- Sillitin V 85
- Sillitin Z 86
- Sillitin Z 86 puriss
- Aktisil PF 777





# End of Presentation

Thank you very much!