

NEW TECHNOLOGY COLLOIDAL SILICA DENSIFIER FOR CONCRETE POLISHING & ANTI-DUSTING TREATMENT



- Colloidal silica is the latest and best technology amongst the silicates.
- Minimal (usually zero) colour change with Forti-Col™.
- Forti-col™ has smallest molecule size amongst colloidal silicas which means:
 - ~ Deeper penetration
 - ~ Higher reactivity & quicker curing.
 - ~ More reactive sites resulting in more complex structures & more SiO₂ inside the pores for greater density and better polish.
- Forti-Col™ makes concrete polishing much quicker as excess product on the surface does not form a hard, gummy film which takes hours to grind off.
- Formulated with advanced additives to optimize penetration
- Lower, non-caustic pH is safer for people & surfaces
- Does not break down under UV so lasts for decades, even outdoors
- Water-based, zero VOC
- Made at our factory in Melbourne, Australia

Forti-Col™ Applications

1. Densifier for Concrete Polishing.

Forti-Col™ is a colloidal silicate with the smallest particle size – smaller than traditional silicates and other colloidal silica densifiers, so it is **perfect for the later stages** of concrete polishing:

- ~ We recommend after 200 grit resin pads.
- ~ Can be used after 50 to 400 grit resin pads

NOTE: Forti-Col EG™ or Forti-Kal™ are recommended for early densification after 30 – 100 grit metal grinding pads

• Anti-dusting treatment

Treating the concrete with penetrating Forti-Col™ will form extra CSH hydrogels and more bonds inside the pores of the concrete to consolidate it. Use high concentration Forti-Col EG™ on very porous concrete slabs.

2. Concrete Polishing:

- Forti-Col™ is best for the later stages** of concrete polishing, after grouting and after 200 grit resin pads, in place of a Lithium Silicate.
- For earlier stages of densification** after grinding with 30 to 100 grit metal-bond pads, we recommend **Forti-Col EG™ or Forti-Kal™**.
- Apply generously with a pump sprayer, saturating the surface evenly so it remains glistening wet for at least 5 - 10 minutes. Avoid Pooling.
- If all the Forti-Col™ penetrates within 10 mins, apply another coat.
- Application rate PER COAT for later densification: approx 6 to 15m² / L (240 to 600 square ft / G).
- DO NOT dilute - Forti-Col™ is a ready-to-use out of the container. Tap water can reduce its penetrating power.

How to Use

IMPORTANT: Always test on an inconspicuous area and allow to dry to check the result.

1. Anti-Dusting Treatment:

- Ensure the concrete is dry inside before applying. If applying as an anti-dusting / treatment on freshly poured (green) concrete, give the concrete a minimum of 2 hours cure time to allow concrete to react and use up most of its water before applying.
- Apply when surface temperature is above 2° Celsius (36° F) and below 27° Celsius (80° F).
- Apply generously with a pump sprayer, saturating the surface evenly so it remains glistening wet for at least 5 - 10 minutes. Avoid Pooling.
- If all the Forti-Col™ penetrates within 10 minutes, apply a second coat.
- Application rate PER COAT: approximately 4 to 10m²
- DO NOT dilute - Forti-Col™ is a ready-to-use out of the container. Tap water can reduce its penetrating power.

Precautions

- Causes skin irritation.
- Causes serious eye irritation.
- Do not get in eyes, on skin or on clothing.
- Wear protective gloves/protective clothing/eye protection/face protection.

First Aid

IF ON SKIN (or hair): Remove all contaminated clothing immediately. Rinse skin with water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Refer to Material Safety Data Sheet for more details.

For advice, immediately contact a doctor, ambulance or a Poison Information Centre:

Australia: 13 11 26 (Australia Wide)

USA: American Association of Poison Control Centres 1-800-222-1222

Canadian Poison Centres: Ontario (24/7) Telephone: 416-813-5900; Toll free: 1-800-268- 9017

UK: England and Wales NHS 111 - dial 111; Scotland NHS 24 - dial 111; Republic of Ireland 01 809 2166

Accidents

Spillage: Take up mechanically or with absorbent material such as sand, earth or vermiculite.

Technical Data

- Colour: Clear to slightly opaque, colourless to light straw yellow liquid
- Weight: 5 L (1.3 gal) = 6 kg (13.2 lb), 20 L (5.3 gal) = 22.5 kg (50 lb)
- VOCs: Zero

Transport

TDG UN Status: This material is not regulated hazardous material for transportation.

Pack Sizes

5 L (1.3 gal); 20 L (5.3 gal)

Shelf Life and Storage Guidelines

Best within 2 years. Store away from direct sunlight.

Keep container tightly sealed, in a well-ventilated place, at 2 - 32 °C or 36 – 90 °F

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