

#### NEW TECHNOLOGY COLLOIDAL SILICA DENSIFIER – THE ULTIMATE DENSIFIER FOR CONCRETE POLISHING, ANTI-DUSTING AND SLAB CURING



- Colloidal silica is the latest and best technology amongst the silicates.
- Minimal (usually zero) colour change with Forti-Col EG™
- Forti-Col EG™ contains a high concentration of a range of the smallest nano colloidal particles which means:
  - ~ Deeper penetration
  - ~ Fast reactivity & curing.
  - ~ More reactive sites resulting in more complex structures & more SiO<sub>2</sub> inside the pores for greater density and better polish.
- Forti-Col EG™ 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

##### • Concrete Densifier for Concrete Polishing

- ~ Forti-Col EG™ is a high concentration colloidal silica densifier with the smallest particle sizes – smaller than traditional silicates and other colloidal silica densifiers.
- ~ Despite the small particle size and greater penetrating power, the high concentration of Forti-Col EG™ makes it ideal for EARLY densification after 30, to 100 grit metal grinding pads.
- ~ Forti-Col EG™ can be used for later densification after 50 to 400 grit resin pads, but Standard Forti-Col™ more cost effective for later densification as concrete is less porous and doesn't usually require a super concentrated product.

##### • Concrete Slab Curing and Anti-Dusting

- ~ Forti-Col EG™ is highly concentrated which makes it ideal to treat fresh slabs to minimize water evaporation and optimize concrete curing.
- ~ Trowelled slabs should be trowelled with Forti-Trowel™ and then treated with Forti-Col EG™. Forti-Trowel™ is formulated with special colloidal particles with a delayed reaction time so it doesn't interfere with the initial reaction of the cement and hardening of the concrete, while improving trowelling and creating a tighter pore structure on the surface of the concrete.

#### How to Use

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

##### 1. Slab Curing & Anti-Dusting Treatment:

- Ensure the concrete is dry inside before applying. If applying 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 ideally below 32°Celsius (90°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 EG™ fully penetrates within 10 minutes, apply a second coat.
- DO NOT dilute - Forti-Col EG™ is a ready-to-use out of the container. Tap water can reduce its penetrating power.
- Application rate PER COAT: approximately 4 to 10m<sup>2</sup> / Litre. Application rate will be lower if applying to a trowelled concrete surface, particularly if trowelled using Forti-Trowel™.

##### 2. Concrete Polishing:

- Forti-Col EG™ is the best choice for the earlier stages of densification when concrete is rough and pores are very open – after grinding with 30 to 80 grit metal-bond pads.
- Forti-Col EG™ can also be used for later densification - we recommend after 200 resin pads, but can be used after 50 to 200 grit resin pads. Standard Forti-Col™ is more cost effective for later densification.
- 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 EG™ penetrates within 10 minutes, apply a second coat.
- Application rate PER COAT: approximately 4 to 10 m<sup>2</sup> / Litre for early densification.
- DO NOT dilute - Forti-Col EG™ 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
- 20 L (5.3 gal) = 24.5 kg (53.9 lb)
- VOCs: Zero

#### Transport

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

#### Pack Sizes

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

#### Manufactured in Australia by Chemforce Pty Ltd

16 Westdene Drive, Laverton North, VIC, Australia, 3026

Emergency Tel: +61 (0)417 339 927 Email: [info@chemforce.com.au](mailto:info@chemforce.com.au) Website: [www.chemforce.com.au](http://www.chemforce.com.au)