

DATA SHEET

ELITE HARD

Carbon Elite Hard is a Premium Quality Potassium Silicate densifier specifically designed for concrete surfaces and is an integral part of the Carbon EliteFloor System. Applied during the polishing process, this impregnating hardener improves the final appearance by creating a significantly harder surface that allows abrasive tooling to work more effectively and to achieve a superior polish.

Carbon Elite-Hard increases gloss and clarity, improves overall abrasion resistance and reduces dusting. Carbon Elite-Hard is a simple, one-coat application with no brooming or rinsing required during application. It is easy to apply and will not skin, film, discolour, or leave white blemishes.

This potassium-based solution is VOC compliant.

KEY BENEFITS

- Part of the Carbon EliteFloor System
- Simple application
- Hardens concrete and terrazzo for polishing
- Allows abrasive tooling to work more effectively
- Improves abrasion resistance and reduces dusting
- Preserves the natural look of the surface
- VOC compliant, may contribute to LEED points (IEQ credit)

APPLICATION (Polished Concrete)

BEFORE APPLICATION, ALWAYS DO A SMALL TEST SAMPLE IN A LESS-VISIBLE AREA TO BE SURE THERE ARE NO VARIABLES OR CONTAMINANTS IN THE SUBSTRATE THAT MAY BE INCOMPATIBLE WITH THIS PRODUCT.

Apply only when temperatures will be above 4°C (40°F) and below 27°C (80°F) for at least 2 hours following application.

Clean surface to remove any dirt, laitance, curing compounds or coatings that may prevent Carbon Elite Hard from penetrating the surface. Do not use citrus or acidic cleaners.

If acidic or d-limonene cleaners have been used, neutralize the surface using an alkaline cleaner (TSP, Tide laundry detergent, etc.).

Using a sprayer, apply Carbon Elite Hard generously and evenly on the surface. Keep the surface glistening wet with product for at least 5 seconds and damp for 20 minutes, adding more product where needed. Apply enough to get sufficient dwell time and penetration, BUT too much product will leave an undesirable coating on the surface, which will need to be mechanically removed. Avoid pooling in application.

Allow a minimum of 4 hours (overnight is recommended) for Carbon Elite Hard to cure before continuing grinding and polishing to the intended final surface profile and desired finish.

ESTIMATED COVERAGE

6 to 15m² per Litre (240 to 600 square ft per gallon) **Coverage rate will vary with concrete porosity and environmental conditions.*

MAINTENANCE

On completed polished concrete surfaces, Clean with Carbon Elite Clean or Carbon Elite Clean ULTRA. If

additional protection or gloss is desired, apply Carbon Elite Protect, or

Carbon Elite-Guard. Consult a Carbon EliteFloor Representative for further information

FURTHER CONCRETE APPLICATIONS

- **Anti-dusting and curing treatment for green (freshly poured) concrete.**

To attain full strength, newly poured concrete needs to retain its water content for long enough for the maximum amount of cement to react and form the correct hydrogels to make the maximum number of bonds

Treating the concrete with penetrating Carbon Elite Hard will form CSH hydrogel inside the pores of the concrete, substantially restricting water bleed and evaporation so water is retained and the concrete can cure properly.

- **Primer / membrane for green concrete.**

Treating the concrete with penetrating Carbon Elite Hard will form CSH hydrogel inside the pores of the concrete, substantially restricting water bleed and evaporation so coatings and other floor coverings can be applied immediately. Freshly poured concrete contains a lot of water which evaporates and causes coatings to blister and delaminate, salts to redeposit underneath and lift tiles, damp and mould growth under carpeting, insulation matting, wood etc. So, slabs are usually left to cure for 60 days before installing flooring.

NOTE: If a 100% membrane is needed against water and water vapour, for example:

a) areas where water can pool and sit for extended periods, such as bathrooms

b) areas where concrete will move and crack over time.

c) surfaces where there can be chemical spills

a suitable acrylic or epoxy class 3 membrane with sufficient elasticity, elongation and chemical resistance is recommended.

APPLICATION (Primer/Anti Dusting)

If applying as a primer / anti-dusting / curing treatment on fresh (green) concrete, it is recommended to give the concrete a minimum of 4 hours cure time before applying, depending on the weather.

Carbon Elite Hard should be applied when the temperature of the surface is below 27°Celsius / 80°Fahrenheit, so the product has sufficient time to penetrate before the water in it evaporates. Apply generously with a pump sprayer, coating the surface evenly so it remains glistening wet for at least 5 seconds. Avoid pooling. Apply enough to get sufficient dwell time and penetration, BUT too much product will leave an undesirable coating on the surface, which will need to be ground off.

As a primer / membrane / anti-dusting treatment: for these applications it is important to achieve maximum penetration and volume of the product so that the pores are sufficiently filled. Minimum 2 coats recommended.

CLEAN UP

Use soap and water to clean tools and equipment. Although Carbon Elite-Hard is non-toxic and environmentally safe, it is alkaline. Use up or dry out extra material and dispose of according to local regulations. Do not pour into sewer systems or storm drains.

TRANSPORT

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

PROPERTIES

Colour: Clear colourless to light straw coloured yellow liquid

Odour: Slight to none

Specific Gravity: ~1.14

Weight: 5L (1.3G) = 6Kg (13.2Lb), 20L (5.3) = 23Kg (51Lb), 200L (53G) = 232Kg (512Lb).

VOCs: Zero

Country of Manufacture: Australia

Shelf Life: 1 year in unopened, sealed container

- Store away from direct sunlight.
- Keep container tightly sealed, in a well-ventilated place, at 36 - 90° Fahrenheit or 2 - 32° Celsius

PACKAGING

5L

20L

200 L (On Special Order)

LIMITATIONS

Carbon Elite Hard will not bridge or fill cracks and will not salvage honeycombed or structurally unsound surfaces. Not suitable for asphalt, non-cement surfaces or painted surfaces. Paint and coatings may be applied over the top of Carbon Elite Hard.

If Carbon Elite Hard comes into contact with glass, fabric, metal, or painted surfaces, immediately wipe contaminated surfaces with a damp cloth, then wipe dry with a second clean cloth.

Make certain the most current versions of the Carbon Elite Hard Product Data Sheet and SDS are being used. Call Customer Service (+61 (08)62431778) or visit our website (www.carbonelitefloor.com.au) to find additional tips, guidelines and specifications.

Proper application is the responsibility of the user. Field visits by Carbon Diamond Abrasives Personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the job site.

SAFETY/HEALTH INFORMATION

KEEP OUT OF REACH OF CHILDREN. This product is alkaline. Keep container closed tightly when not in use. Do not drink. If swallowed, do not induce vomiting; drink two glasses of water and call a physician. Wear goggles and gloves. If splashed in eyes, rinse eyes immediately with clean water and call a physician if irritation persists. Carbon Elite Hard will dry out and irritate the skin. Clean skin with soap and water promptly.

CAUTION: Surfaces wet with Carbon Elite Hard may be slippery.

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/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

For Chemical/Medical Emergencies:

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

TECHNICAL SERVICE

Customer Care: +61 (08)62431778

Email: sales@carbondiamondabrasives.com.au

Web: www.carbondiamondabrasives.com.au www.carbonelitefloor.com.au

Other Products in the EliteFloor System include:

Elite Cut

Elite Fill

Elite Hard ULTRA (Lithium)

Elite Guard

Elite Protect

Elite Clean

Elite Clean ULTRA