



## GREEN CONCRETE CURE & HARDENER

### Description & Uses

A non membrane forming silicate proprietary solution that provides an exceptional cure regime equal to water pond curing. Apply to the concrete surface immediately after initial set. Very effective cure regime for shot crete.

### Features and Benefits

- Will cure concrete equal to water pond curing.
- Virtually eliminates plastic cracking.
- Low cost cure regime.
- Hardens surface and reduces dusts.
- Reduces shrinkage.
- Retards efflorescence.
- Can be used on vertical or horizontal substrates.
- Zero VOC, environmentally friendly, user safe.
- Compatible with most flooring and coating systems.
- After trade friendly.
- Indefinite shelf life.
- Minimum site disruption, trafficable after 2 hours.

### Testing and Certifications

The American Concrete Institute, ACI, defines curing as, "The process by which hydrolic-cement concrete matures and develops hardened properties over time as a result of the continued hydration of the cement in the presence of sufficient water and heat." Water curing is widely regarded as the best curing method available. However, it is often replaced with less effective membrane-forming methods in deference to the logistical and economic difficulties associated with water ponding.

X100 Green Cure is not a membrane-forming compound, so AS 3799:1998 does not apply. The goal of curing is to improve the hardened properties of concrete.

### Recommended Substrate Conditions & Preparation

#### Important Notes:

1. Spray apply X100 Green Cure at a minimum of the Recommended Application Rates
2. Do not apply on frozen substrate or when temperature is below 3°C when getting colder.

3. Do NOT apply if rain is forecast within 3 hours. If rain occurs in this time frame call your distributor for advice.

4. X100 Green Cure may etch glass/tiles or dull brushed and shiny aluminium and can be difficult to remove from other surfaces once it dries. Cover and mask surrounding surfaces or rinse immediately if sprayed.

### Additional Data and Precautions

Available in 15, 205 and 1250 litre containers.

1. Protect areas not intended for coverage.
2. Do not apply on frozen substrate or when temperature is near freezing.
3. As good safety practice during spraying we recommend the use of a face mask during application. Refer to MSDS.

4. Restrict access to areas being treated as surface may be slippery until all product has dropped in or removed from surface.

5. The green colour in X100 Green Cure aids application and dissipates after drying.

6. For more information read Material Safety Data Sheet available at [www.oxtekaus.com](http://www.oxtekaus.com)

### Subsequent Coverings and Coatings

X100 Green Cure does not provide a vapour or moisture barrier for impervious floorcoverings or coatings. Oxtek distributes and manufactures Protect Crete Densi Proof and Moisture-Fix that are designed for complete and permanent protection against vapour and water damage potential. If your building has a finishes scheduled for impervious flooring and or coatings you should specify and use Densi Proof at time of pour in lieu of X100 Green Cure. You will achieve the same cure benefits and have a warranted moisture suppression system that has stood the test of time in Australia and New Zealand for over 18 years. If you realise that you will

require a moisture barrier after the X100 Green Cure application Moisture-Fix can be applied over the top with minimum preparation again for a fully warranted moisture barrier system. Densi Proof and Moisture-Fix treat excess moisture established by testing as described in Appendix A Floor Coverings Standard AS 1884:2012

Also see Oxtek X520 Warehouse for an improved quality and stain resistant polished floor system.

## Application Guide

### Application Rates

**Burnished or steel troweled :** 6.5 - 8.0m<sup>2</sup> per litre.

**Broom finished or open surfaced:** 3.5 - 6.5m<sup>2</sup> per litre.

### As a Cure Method at Time of Pour:

For optimum cure benefits it is ideally applied to the newly-poured concrete surface as soon as is practical following its surface finishing phase. Should conditions require the surface to be walked on, for application, concrete should be allowed the time to adequately set, so as not to imprint or mar its surface during application.

Apply evenly with a low-pressure non-atomizing, spray apparatus such as a pump-tank sprayer or airless set as low as possible at or below 800psi. Allow material to penetrate (drop in) the surface and if you find that after an hour, that some areas have totally dropped and some not, then distribute the excess product over the dry areas. It is important that the product is distributed evenly by continuous working by soft broom in all directions to ensure the product is presented to all surface profiles.

There is no need to put any pressure on the broom as it is only used to distribute the product evenly and if pressure is applied it tends to have the opposite effect in not leaving enough material on the surface. Do not allow product to dry in puddles.

**Caution:** Like many construction materials including fresh concrete X100 Green Cure contacting glass should be flushed with water and not be allowed to dry, since glass may etch. X100 Green Cure will dull brushed and shiny aluminium, however, aluminium's integrity will be otherwise unaffected.

**HOT & COLD TEMPERATURES** In hot or windy conditions, the concrete surface temperature or wind may dry out the product prematurely before it has a chance to drop in thoroughly, in this case it is advisable to mist spray the surface with water and apply X100 Green Cure whilst the surface is damp but not puddled. This also helps with a relaxation of surface tension allowing a more efficient and faster penetration as well as premature evaporation or drying out.

**CLEAN UP** Clean up with water.

## Physical and Chemical Properties

<b>Appearance:</b>	Low viscosity liquid.
<b>Colour:</b>	Clear green hue
<b>Odour:</b>	Almost none.
<b>pH:</b>	Ca. 11.3.
<b>Vapour Pressure:</b>	Not available.
<b>Vapour Density:</b>	Not available.
<b>Boiling Point/ Range:</b>	> 100°C @ 760 mm Hg.
<b>Solubility in Water:</b>	Fully miscible.
<b>Specific Gravity:</b>	Ca. 1.08.
<b>Flashpoint:</b>	Not applicable.
<b>Auto Ignition Temperature:</b>	Product is not self igniting.
<b>Flammability Limits:</b>	Not applicable.
<b>Viscosity:</b>	Low.
<b>Stability:</b>	Stable under normal conditions.

**Chemical Stability:** Stable at normal temperatures and pressure.

**Thermal Decomposition:** No decomposition if used according to specifications.

**Dangerous Reactions:** Strong exothermic reaction with acids. Reacts with light alloys to form hydrogen.

**Conditions to Avoid:** Avoid contact with incompatible materials.

**Materials to Avoid:** Acids, light alloys.

**Hazardous Decomposition Products:** No dangerous decomposition products known.

## On Site Assistance

**TRAINING** Protect Crete / Oxtek offer full product training and installation advice for X100 Green Cure and the total Oxtek range of moisture and protection systems. Call your local Oxtek distributor to arrange this complimentary help at your premises or on site today.



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