



## Description

X230 Densi-Proof Repeller™ a single pack one application spray on system that deeply penetrates new or existing concrete, provides curing, permanent waterproofing, and surface protection. The application of X230 Densi-Proof Repeller™ at time of the concrete pour will cure concrete to provide the hardened properties equivalent to that of water pond curing, permanently waterproof concrete from any direction, making the concrete impermeable and increasing its longevity whilst providing surface protection from contamination.

Adopting the use of X230 Densi-Proof Repeller<sup>™</sup> at time of the concrete pour as an effective curing regime, will significantly reduce the incidence of dry shrinkage cracking, providing a hardened, denser and dust proof concrete, compatible with line marking paint. X230 Densi-Proof Repeller conforms to the moisture suppressant requirements as per NZAS1884-2013 and achieves the cure requirements of NZS 3109:1997 & NZS 3101:part 1 2006.

X230 Densi-Proof Repeller™ provides enhanced surface protection and ease of cleaning against acids, oils, water-based stains, chemicals, body fluids, wine, grease, and others.

## **Typical Applications**

Examples for areas of use are as follows: Internal or external exposed natural concrete, rooftop & basement carparks, restaurants, outdoor eating areas, garden centres, warehouses, factories, breweries, wineries.

### **Features and Benefits**

Some features and benefits of X230 Densi-Proof Repeller™ include the following:

- Colloidal silicate used to cure, densify, harden, and waterproof concrete.
- Permanently waterproofs concrete from any direction.
- Increases surface tensile & compressive strength.
- Reduces dry shrinkage cracking.
- Provides a hardened, abrasion resistant, dust-proof surface.
- Retards efflorescence.
- Stabilises pH.
- Resists surface staining.
- Recued tyre noise and marks.
- Enhance traction quality.

- Improved chemical resistance and protection.
- Eliminates mould and odours.
- Low VOC, environmentally friendly and user safe.
- Used on horizontal or vertical substrates.
- Doesn't form a membrane After trade friendly.
- Compatible with line marking paints and other coating products.
- UV Resistant.
- Resist freeze thaw damage.
- Minimum site disruption and trafficable after 2 hours.
- HACCP approved.
- Test reports available on request.

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# **Physical Properties**

Appearance	Low viscosity clear liquid
pH	Ca. 11.4
Flash Point	Not applicable
Relative Density	Ca. 1.13 @ 20°C
Volatile Organic Compounds (VOC) Con	1g per Litre
Viscosity	Low
Odour	Almost none
Initial Boling Point / Boiling Range	>100°C @ 760 mm Hg
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limits	Not applicable
Auto-ignition Temperature	Product not self-igniting
Solubility	Fully miscible in water

## **Recommended Substrate Conditions & Preparation**

**Product Coverage Rates:** Freshly Placed Concrete: Minimum 5m2 per litre.

Existing Concrete: Minimum 5m2 per litre.

## **Important Notes:**

- 1. Wax, paint, curing compounds or a burnished surface restricting access to concrete's interior must be chemically or mechanically removed for X230 Densi-Proof Repeller™ to penetrate the substrate.
- 2. To test for adequate porosity, apply droplets of water on the concrete surface, if the droplets do not penetrate the concrete within 2 minutes, then X230 Densi-Proof Repeller™ will not function as intended and may be ineffective.
- 3. Areas of high porosity have a faster penetration rate. These areas appear dry immediately after spraying and will require additional product.
- 4. Do not apply on a frozen substrate or on a falling substrate temperature of below 3°C. Call for advice if applying during colder periods. Do NOT apply if rain is forecast within 24 hours.
- 5. When applying line marking paint on X230 Densi-Proof Repeller™ treated concrete always follow the paint manufacturers surface preparation requirements (see Overcoat Timelines).
- 6. X230 Densi-Proof Repeller™ 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.





- 7. Concrete being treated must be fit for purpose for the intended function of X230 Densi-Proof™ Repeller Structural cracks, active cracks, and faulty control and cold joints will not be repaired with a X230 Densi-Proof Repeller™ application.
- 8. We recommend the wearing of eye protection, gloves, and a painter's face mask during application. Refer to MSDS available from www.oxtek.com.au.

## **Application Guidelines**

#### Note:

In hot climates, mist-wet the surface with water and remove any puddles prior to application. Use best hot weather concrete placement techniques. The use of Aliphatic alcohol is recommended in hot and windy conditions and will not detrimentally affect the application and performance of X230 Densi-Proof Repeller™.

### On Already-Set Concrete:

X230 Densi-Proof Repeller™ is to be applied to a clean and absorbent substrate from any standing or pooling water on the surface. Please note: on occasions, the concrete may be of poor quality and be very porous, which may require additional product to ensure that there is enough product to complete the capillary chemical gel forming reaction.

### At Time of Pour:

X230 Densi-Proof Repeller™ is ideally applied to the newly-poured concrete surface as soon as is practical following its surface finishing phase. Should site 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 mark its surface during application.

Please Note: If application is more than 4 hours after initial set, the benefits of using this product as an effective curing regime will be reduced (subject to climatic conditions).

Recommended minimum coverage rate is 5m2 per litre.

### **Application:**

Apply X230 Densi-Proof Repeller™ using low-pressure non-atomising spray apparatus such as a pump-tank or battery pack sprayer, complete with fan spray nozzle or by airless spray unit set at 800psi. Holding spray tip (eg .019" - .024") 150mm from surface, apply X230 Densi-Proof Repeller™ at minimum rate of 5m2 per litre with an overlapping spray pattern of 50%. Using a soft broom sweep and spread-out puddled product as it penetrates. Do not allow product to puddle dry on the surface. If product gels on the surface remove with a squeegee.

Note: Always begin application at the lowest elevation. For example, walls and slopes should be applied side-to-side, from the bottom up.





## Application to vertical substrates:

Please contact Oxtek Solutions to confirm suitability for use, and for guidance on surface preparation requirements and application methodology.

## Caution: For recently placed and unused concrete only.

For existing, soiled, used and old concrete a two-parts sytems approached should be adopted for best results. X200 Densi-Proof<sup>™</sup> or X220 Moisture Fix® will decontaminate and purge deep seated unwanted substance to the substrate surface which will require to be removed prior to applying the X300 Repeller<sup>™</sup> invisible penetrative sealer for additional surface protection. Please refer to the relevant product TDS available from www.oxtek.com.au.

#### **Overcoat Timelines:**

Line marking paint or other coating products can be applied 14 days from the date of concrete placement and X230 Densi-Proof Repeller™ application.

If the X230 Densi-Proof Repeller™ is applied to a substrate that is older than 14 days, line marking paint or other coating products can be installed 24 hours post application.

## **Subsequent Coverings and Coatings:**

A simple preparation of sanding or blue pad is recommended to remove any laitance, efflorescence or any contamination off the concrete surface to prepare the substrate for any line marking paint or other coating product. Always follow the line marking paint or coating product manufacturers recommendations and requirements.

#### **Hot and 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 X230 Densi-Proof Repeller™ 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. X230 Densi-Proof Repeller™ should not be applied if the ambient temperature is below 3°C and falling. X230 Densi-Proof Repeller™ is not affected at all by temperature change after 24 hours, not even in freeze thaw conditions.

## **Additional Advice and Precautions:**

- 1. Protect areas not intended for coverage. Do not walk product onto any adjacent surfaces as marking may be permanent.
- 2. Restrict access to areas being treated as surface may be slippery until all product has penetrated the substrate or been removed from surface.

Available in 5, 15, 200 and 1,000 litre containers.





## **Maintenance**

## Spillages:

All spillages should be removed as quickly as possible. This is good practice in terms of Health and Safety and the general upkeep of the treated surface. If spillages such as oil and grease are left longer than 24 hours on the surface some staining may occur.

### Cleaning:

All areas should be cleaned on a regular and ongoing basis, by light scrubbing with warm water and detergent.

#### **Repairs:**

Localised repairs can easily be undertaken to damaged or heavily abraded areas using X300 Repeller<sup>™</sup>. This can be applied with a low-pressure spray by maintenance personnel – dry in approximately 30 minutes. Please note that although X300 Repeller<sup>™</sup> is an invisible penetrative densifier and sealer, it is likely that some darkening may appear on the treated surface, however this will have no detrimental effect on the performance of the product.

## **Warranty Request & Registration**

Warranties are available on request subject to satisfying our Terms & Conditions and by agreeing to our product application criteria. An issued warranty is project specific and will require a consultation and a registered specification number. A request for warranty must be registered prior to commencement of the project.

We have technical expertise and experience to help and consult on your future projects or assist your existing projects maintain time and budget.

Australia, UK, & Asia Contact Oxtek Solutions Head Office: Call +61 3 9798 7534 or email reception@oxtek.com.au

#### New Zealand Contact:

Gilt Edge Industries call 0800 445 833 CHC: 03 379 7067 AKL: 09 443 7067 or email help@giltedge.co.nz.

NB: Concrete Substrates of 15 years or older will not be covered under an Oxtek Solutions warranty.





# **Memberships & Certifications**

Oxtek Solutions are actively committed towards best practice and environmentally friendly systems and procedures within the concrete and flooring industries.

We are proud to support this through our memberships and affiliations with the following industry bodies.























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