

X-20 COOLROOM & FREEZER™

ENHANCED CONCRETE PROTECTION FOR COLD STORAGE



TDS 116 – V1W 1-APR-23

Description

X-20 Coolroom & Freezer™ a single pack one application spray on system that deeply penetrates new or existing concrete, provides curing, permanent waterproofing, and surface protection from bacteria. With PROVEN TESTED safe silver ion antimicrobial additive X-20 Coolroom & Freezer™ will protect concrete from E coli & MRSA. The application of X-20 Coolroom & Freezer™ 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 X-20 Coolroom & Freezer™ 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 and other coating products.

X-20 Coolroom & Freezer™ provides enhanced antimicrobial 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: warehousing, cool rooms & freezers.

Features and Benefits

Some features and benefits of X-20 Coolroom & Freezer™ include the following

- Antimicrobial formulation offers protection from E. coli & MRSA.
- Colloidal silicate used to cure, densify, harden, and permanently waterproof concrete.
- Increases surface tensile & compressive strength.
- Resists freeze thaw damage.
- Eliminates moulds and odours.
- Reduces dry shrinkage cracking.
- Provides a hardened, abrasion resistant, dust-proof surface.
- Retards efflorescence.
- Resists surface staining, resist surface erosion, extending concrete life.
- Stabilises pH.
- Improved chemical resistance and protection.
- Acid and effluent resistant.
- Low VOC, environmentally friendly and user safe.
- Substantially reduces cleaning water usage.
- Used on horizontal or vertical substrates.
- Temporary hydrophobic beading.
- Doesn't form a membrane - After trade friendly.
- Compatible with line marking paints.
- UV Resistant.
- Minimum site disruption and trafficable after 2 hours.
- Test reports available on request.

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 5/ 17-19 Miles Street, Mulgrave VIC 3170
 Phone: +61 39798 7534 Email: reception@oxtek.com.au

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Physical Properties

Appearance	Low viscosity clear blue liquid
pH	Ca. 11.4
Flash Point	Not applicable
Relative Density	Ca. 1.13 @ 20°C
Volatile Organic Compounds (VOC) Con	6g per Litre
Viscosity	Low
Odour	Almost none
Initial Boiling 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 5m ² per litre.
	Existing Concrete:	Minimum 5m ² 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 X-20 Coolroom & Freezer™ 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 X-20 Coolroom & Freezer™ 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 X-20 Coolroom & Freezer™ treated concrete always follow the paint manufacturers surface preparation requirements (see Overcoat Timelines).
6. X-20 Coolroom & Freezer™ 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. 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.

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Application Guidelines

Note:

In hot climates, mist-wet the surface with water and remove any puddles prior to application. Use best practice 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 X-20 Coolroom & Freezer™.

On Already-Set Concrete:

X-20 Coolroom & Freezer™ 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:

X-20 Coolroom & Freezer™ 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).

Application:

Apply X-20 Coolroom & Freezer™ 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 X-20 Coolroom & Freezer™ 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.

Note:

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

Do not allow product to puddle dry on the surface. If product gels on the surface remove with a squeegee.

Note: Application to vertical substrates:

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

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Caution: For recently placed and unused concrete only.

For existing, soiled, used and old concrete a two-part system approach should be adopted for best results. X200 Densi-Proof™ 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 X310 Repeller Plus +™ invisible penetrative sealer for additional antimicrobial 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 X-20 Coolroom & Freezer™ application.

If the X-20 Coolroom & Freezer™ 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 contaminants off the concrete surface to prepare the substrate for any line marking paint or other coatings 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 X-20 Coolroom & Freezer™ 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. X-20 Coolroom & Freezer™ should not be applied if the ambient temperature is below 3°C and falling. X-20 Coolroom & Freezer™ 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 Available in 5, 15, 200 and 1,000 litre containers.

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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. Call or email the Oxtek Solutions Head Office to arrange assistance and advice anywhere within Australia, New Zealand, or Asia.

Call +61 3 9798 7534 or email reception@oxtek.com.au

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

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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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