



X-20 COOLROOM & FREEZER™

Technical Data Sheet

SteriTouch® ANTIMICROBIAL WITH ADDED SURFACE PROTECTION

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Description & Uses



X-20 Coolroom & Freezer™ is a single pack one application spray on system that deeply penetrates new or existing clean concrete, permanently filling the concrete's porosity, provides curing, waterproofing, and deep matrix resistance to bacteria, moulds and fungi. **X-20 Coolroom & Freezer™** with **SteriTouch®** has independent antimicrobial testing showing complete protection against *E.coli* and *Methicillin Resistant Staphylococcus aureus*. The added **X300 Repeller™** provides surface protection and ease of cleaning against acids, oils, water based stains, chemicals, body fluids, wine, grease and others. Conforms to the moisture suppressant requirements as per **AS1884-2012**.

Features and Benefits

- Will cure concrete equal to water pond curing.
- Permanently waterproofs concrete from any direction.
- Makes concrete impermeable, increasing longevity.
- Resists surface staining.
- Proven control of *E.coli* and *Staphylococcus aureus*.
- Resists freeze thaw damage.
- Retards efflorescence.
- Reduces surface erosion, extending concrete's life.
- Used on horizontal & vertical substrates.
- Zero VOC, environmentally friendly, user safe.
- Compatible with epoxy and acrylic line marking paints.
- Eliminates moulds and odours.
- Indefinite shelf life.
- Minimum site disruption, trafficable after 2 hours.
- Reduces dry shrinkage cracking.
- Independent antimicrobial efficacy testing.
- Substantially reduces cleaning water usage.
- Acid and effluent resistant.

Physical and Chemical Properties

Appearance:	Low viscosity clear blue liquid.	Relative Density:	Ca. 1.10 @ 20°C.
Odour:	Almost none.	Solubility:	Fully miscible in water.
pH:	Ca. 11.4	Auto-ignition Temperature:	Product is not self-igniting.
Initial Boiling Point/ Boiling Range:	> 100°C @ 760 mm Hg.	Viscosity:	Low.
Flash-point:	Not applicable.	Volatile Organic Compounds (VOC) Content:	0.0 % w/w.
Flammability (solid, gas):	Not applicable.	Per Cent Volatile:	Ca. 0 % w/w.
Upper/Lower Flammability or Explosive Limits:	Not applicable.		

Recommended Substrate Conditions & Preparation

Freshly Placed Concrete: 5m² per litre.
Existing Concrete: 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 **X-20 Coolroom & Freezer™** to penetrate and work properly.

2. Areas of high porosity have a faster penetration rate. These areas appear dry immediately after spraying and will require additional product.

3. Do not apply on frozen substrate or when temperature is below 3°C when getting colder. Call for advice if applying during colder periods.

4. Do **NOT** apply if rain is forecast within 3 hours.

5. Before applying any paint, wait 24 hours after application with **X-20 Coolroom & Freezer™**. Always follow paint manufacturer's surface preparation guidelines and requirements.

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 use of a face mask during application. Refer to MSDS available from www.oxtek.com.au



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Note: In hot climates, mist-wet the surface with water and remove any puddles prior to application. Follow best accepted hot weather slab placing practice.

On Already-Set Concrete:

Apply X-20 Coolroom & Freezer™ a low-pressure non-atomizing, spray apparatus such as a pump-tank or battery pack sprayer. Complete with fan spray nozzle. 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%. Begin application at the lowest elevation. For example, walls and slopes should be applied side to side, from the bottom up.

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.

As a Cure Method at Time of Pour:

Apply with a low-pressure non-atomizing, spray apparatus such as a pump-tank or battery pack sprayer. X-20 Coolroom & Freezer™ 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. Recommended minimum coverage rate as a cure method is **5m² per litre**. Work quickly as when product dries it will repel itself.

Caution: For existing, soiled, used and old concrete a two part system must be used. X260 Medi-Vet® will decontaminate and purge deep seated unwanted substances to the surface and these need to be removed prior to finishing with the X-20 Coolroom & Freezer™. Use a two part system of X260 Medi-Vet® (refer to TDS) and then clean and apply X-20 Coolroom & Freezer™.

Call our Oxtek rep for advice. **1300 698 351**

Additional Data and Precautions

Available in 15, 200 and 1000 litre containers.

1. Any coatings or contamination that may restrict access to the concrete's interior must be chemically or mechanically removed for X-20 Coolroom & Freezer™ to penetrate.
2. Protect areas not intended for coverage.
3. Restrict heavy use for 24 hours after application.

4. Try to maintain a live wet edge as once product is dry it will repel itself
5. Remove excess or puddled product after 1 hour with a squeegee as gelled product will be difficult to remove later.
6. For more information read Material Safety Data Sheet available at **www.oxtek.com.au**

Warranty Registration & Training

An issued 15 year warranty is project specific and will require us to provide consultation, a site specific specification and a registered specification/warranty number prior to the commencement of product application.

A Warranty Application Form, will be included in the specification and must be completed in full by the applicator, then forwarded to **Oxtek Solutions** after each application.

For customers that require a written warranty, all applicators must be trained, and approved by **Oxtek Solutions**. Complimentary full training and installation advice is available for the full **Oxtek** product range.

Call **Oxtek** to arrange today

1300 698 351 www.oxtek.com.au

Certifications





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SteriTouch is an established brand in antimicrobial technology,

based in the UK. The anti microbial performance of **X-20 Coolroom & Freezer™** is confirmed by independent laboratory testing to the international standards (JIS and ISO) and is proven to be 99.99% effective against MRSA and E.coli (test reports available on request). With the combination of **SteriTouch® X-20 Coolroom & Freezer™** creates a permanent barrier against the growth of bacteria, biofilm and moulds.

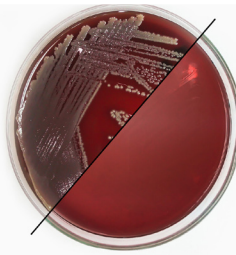
SteriTouch is safe. SteriTouch is an additive based on ionic silver. We do not use nano-silver, triclosan or other organic antimicrobial additives which have health and environmental concerns. The additives we use are non-leaching and non-sensitising.

SteriTouch gives continuous protection. Ionic silver based additives will not lose efficacy due to leaching or migration, they are evenly dispersed and embedded through out **X-20 Coolroom & Freezer™** even scratches and abrasion do not effect the antimicrobial performance. Cleaning chemicals such as chlorine bleach, disinfectants, alcohol and even harsh industrial products like MEK (methyl ethyl ketone) will no diminish the antimicrobial properties of **X-20 Coolroom & Freezer™**.

All test samples are inoculated in triplicate, with an additional three replicates of the control. The bacterial population on three control replicates is evaluated immediately following inoculation. This is assumed to be the initial population on all test samples (i.e. the population at zero hours). The remaining samples are incubated for the test period (24 hours) at 35°C, at which time the bacterial population is evaluated.

Independent Antimicrobial Test Report

Evaluation of the antimicrobial performance of samples containing antimicrobial additives. All testing is conducted by an independent laboratory using the ISO 22196 / JIS Z 2801:2000 test method, briefly summarised as follows;

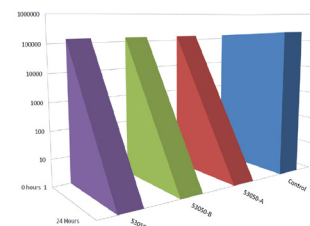


Each test sample is inoculated with a suspension of the test organism. The inoculation is held in contact with the test sample using a sterile polyethylene film.

MRSA (Methicillin Resistant Staphylococcus aureus)

Tested at 35°C

Sample		Number of live organisms (Colony Forming Units)		% reduction of Colony Forming Units, expressed	
		0 hours	24 Hours		
Control	Untreated polyethylene film	140000	220000	N/A	
53050-A	X-20 Coolroom with 1% ST1156	140000	<10	>99.995% Reduction	EXCELLENT
53050-B	X-20 Coolroom with 1% ST1156	140000	<10	>99.995% Reduction	EXCELLENT
53050-C	X-20 Coolroom with 1% ST1156	140000	<10	>99.995% Reduction	EXCELLENT



Notes: CFU = Colony Forming Units
The theoretical limit of detection is 10 CFU. If no bacteria are recovered the result is reported as "10 CFU".

Escherichia coli

Tested at 35°C

Sample		Number of live organisms (Colony Forming Units)		% reduction of Colony Forming Units, expressed as comparison with control	
		0 hours	24 Hours		
Control	Untreated polyethylene film	110000	12000000	N/A	
53050-A	X260 MediVet with 1% ST1156	110000	<10	>99.99991% Reduction	EXCELLENT
53050-B	X260 MediVet with 1% ST1156	110000	<10	>99.99991% Reduction	EXCELLENT
53050-C	X260 MediVet with 1% ST1156	110000	<10	>99.99991% Reduction	EXCELLENT

