

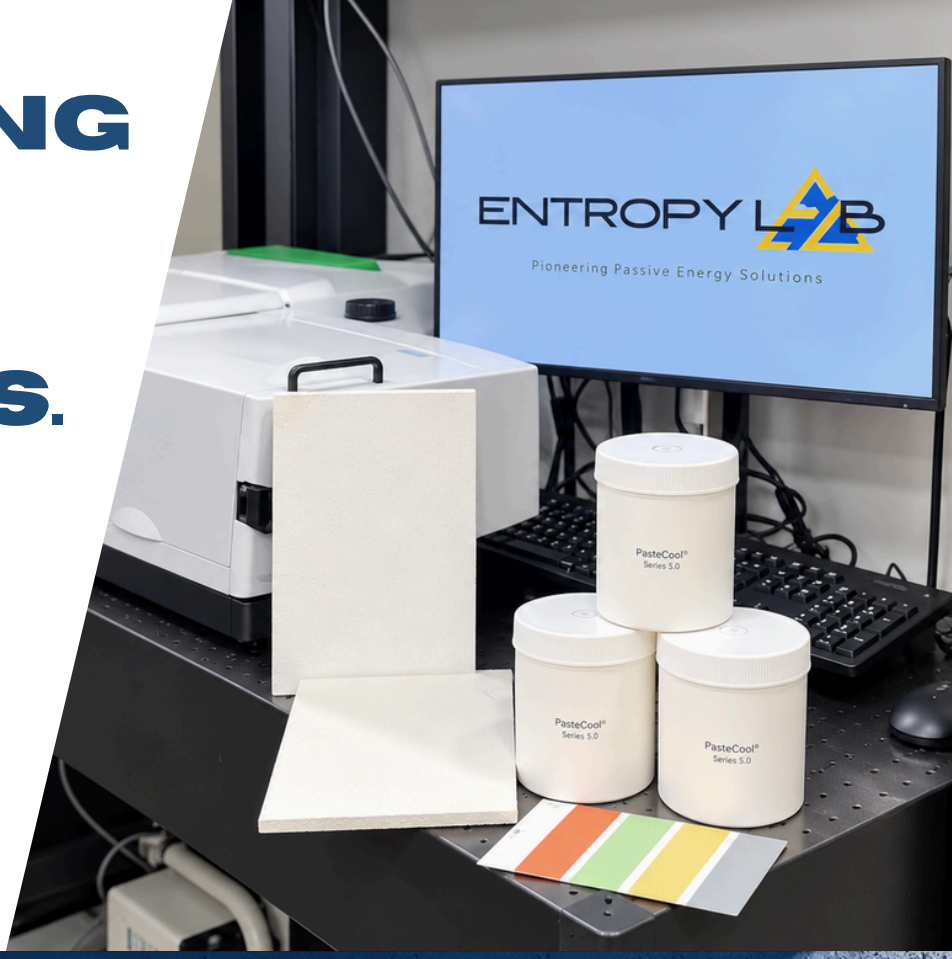
PASTECOOL® PAINT

ENGINEERED FOR COOLER SURFACES.

Advanced reflective and radiative coating technology for passive cooling.

PIONEERING PASSIVE ENERGY SOLUTIONS.

Born from advanced research, Entropy Lab develops passive energy solutions for cooler, more comfortable and climate-resilient environments.



OUR EXPERTISE

COOLING TECHNOLOGY

Pastecool® Reflective & Radiative Cooling Coatings

SURFACE SOLUTIONS

Industrial & Architectural Applications

PERFORMANCE TESTING

Paint Optical Performance Testing

FROM RESEARCH TO APPLICATION

Turning scientific research into practical, performance-driven cooling solutions.



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PASTECOOL PAINT

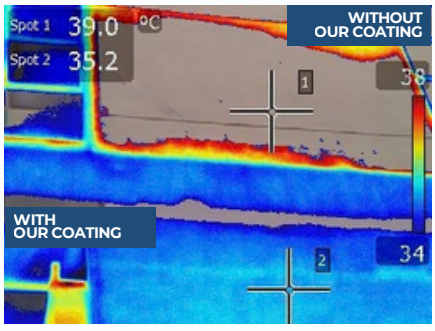
A SMARTER WAY TO COOL.



PROVEN COOLING PERFORMANCE

Surfaces coated with our technology stay significantly cooler under the same solar conditions.





3.8°C LOWER

LOWER SURFACE TEMPERATURE

ENERGY SAVING POTENTIAL

MORE COMFORTABLE ENVIRONMENTS

ENABLED BY ADVANCED TECHNOLOGY

The cooling paint engineered for precision, luxury, and unmatched performance. Its passive radiative technology lowers infrastructure temperatures, delivering comfort, efficiency, and climate resilient elegance.



PASTECOOL PAINT

SERIES 1, 3, 4 ACRYLIC SYSTEM

For concrete, metallic roofs, metallic sheets and masonry.



Series 1,3 2-COAT SYSTEM

- Series 1 primer x 1 layer
- Series 3 topcoat x 1 layer

Series 3 2-COAT SYSTEM

Series 3 topcoat x 2 layers

Series 1,4 3-COAT SYSTEM

- Series 1 primer x 1 layer
- Series 4 topcoat x 2 layers

TECHNICAL SPECIFICATIONS

Resin: Water-based Acrylic System
Application: 2 or 3 coat systems
Compliance: SS345, SS678, SS579
Certification: SGL032 (in progress)
Packaging size: 5 kg and 20 kg
Specific gravity: 1.4-1.6 ± 0.1 kg/litre

KEY PERFORMANCE

> 90% Solar Reflectivity

ZERO VOC

95% Mid-IR Emissivity

6 YEARS Paint Warranty

COMPLIANCES

Singapore Standards Council

GreenLabel SINGAPORE

SERIES 2, 5 SILICATE SYSTEM

For concrete, roofs and masonry.



PRODUCT DATASHEETS

Scan to view product specifications.

Series 2,5 2-COAT SYSTEM

- Series 2 primer x 1 layer
- Series 5 topcoat x 1 layer

Series 2,5 3-COAT SYSTEM

- Series 2 primer x 1 layer
- Series 5 topcoat x 2 layers

TECHNICAL SPECIFICATIONS

Resin: Water-based Silicate System
Application: 2 or 3 coat systems
Compliance: SS579
Certification: SGBC, SGL032 (in progress)
Packaging size: 5 kg and 20 kg
Specific gravity: 1.5-1.6 ± 0.1 kg/litre

KEY PERFORMANCE

> 93% Solar Reflectivity

ZERO VOC

95% Mid-IR Emissivity

6 YEARS Paint Warranty

COMPLIANCES

Singapore Standards Council

SINGAPORE GREEN BUILDING COUNCIL

GreenLabel SINGAPORE

PASTECOOL PAINT

COLOR OPTIONS

A range of colors designed to complement different architectural styles and applications.



White
TSR: > 90

ICY1025
TSR: 86.2

ICY1050
TSR: 84.8

ICY1075
TSR: 82.9

ICY1100
TSR: 83.1

ICY2025
TSR: 81.8

ICY2050
TSR: 79.1

ICY2075
TSR: 76.8

ICY2100
TSR: 76.0

ICR1025
TSR: 69.3

ICR1050
TSR: 64.3

ICR1075
TSR: 60.7

ICR1100
TSR: 58.0

ICG1025
TSR: 74.4

ICG1050
TSR: 68.7

ICG1075
TSR: 64.8

ICG1100
TSR: 63.5

ICB1025
TSR: 78.2

ICB1050
TSR: 72.9

ICB1075
TSR: 70.5

ICB1100
TSR: 59.7

ICL1025
TSR: 65.3

ICL1050
TSR: 58.2

ICL1075
TSR: 53.7

ICL1100
TSR: 51.0

ICW1025
TSR: 64.3

ICW1050
TSR: 56.1

ICW1075
TSR: 51.6

ICW1100
TSR: 49.9

TSR (Total Solar Reflectance)

A higher TSR value indicates greater solar reflectance, helping to reduce heat gain.

Disclaimer
Actual color may differ due to printing discrepancy.

OUR PROJECTS



From trial studies to real-world projects, PasteCool has demonstrated measurable cooling performance across diverse applications.

FEATURED PROJECTS



Toll Logistics Clementi, Singapore

Surface Temperature Reduction	**2-5°C**
Total Surface Area	**~100m²**
System	**Series 2 + Series 5**



VidaCity @ Pasir Ris, Singapore

Interior Temperature Reduction	**4-6°C**
Total Surface Area	**~300m²**
System	**Series 1 + Series 4**



Factory Metallic Roof, Jiangxi, China

Surface Temperature Reduction	**11.8°C**
Interior Temperature Reduction	**6.2°C**
Total Surface Area	**~20,000m²**
System	**Series 1 + Series 4**

GLOBAL APPLICATIONS

Bringing passive cooling to projects across different regions.



Singapore
Metal Roof



Singapore
Building Exterior



Singapore
Factory



Singapore
Office Container



Indonesia
Warehouse Exterior



China
Solar Project



UK
Office Container



USA
Warehouse Roof

TESTING COOLING PERFORMANCE.

Real-world testing with measurable results.

PASTECOOL PAINT

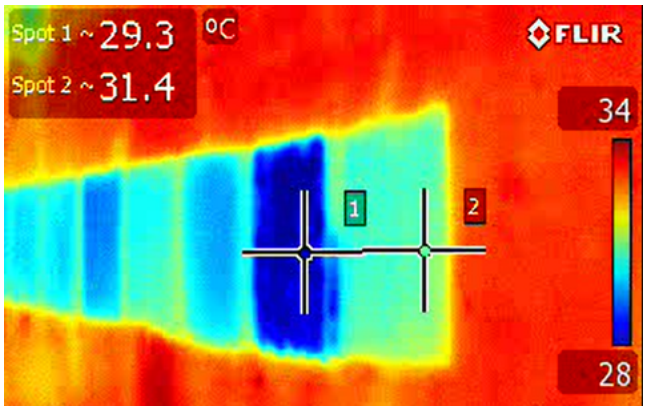
All tests are compared against same conditions

TRIAL 01: Test Panels

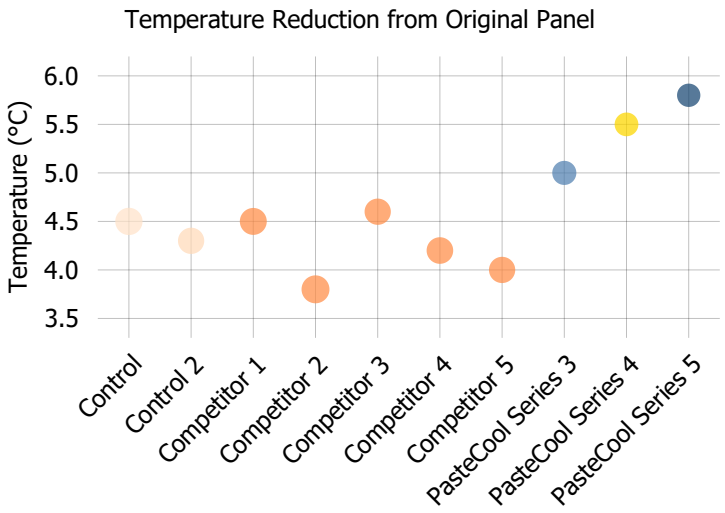
PasteCool All Series

9012 Tampines Industrial Estate

>6°C LOWER SURFACE TEMPERATURE



[Right to Left] Competitor #5, PasteCool Series 6*, PasteCool Series 4, PasteCool Series 3, PasteCool Series 5, Control #2, Competitor #4



SUPPORTED BY

jtc

HOUSING & DEVELOPMENT BOARD

VIEW FULL TRIAL DATA

Scan the QR code to view the full case study

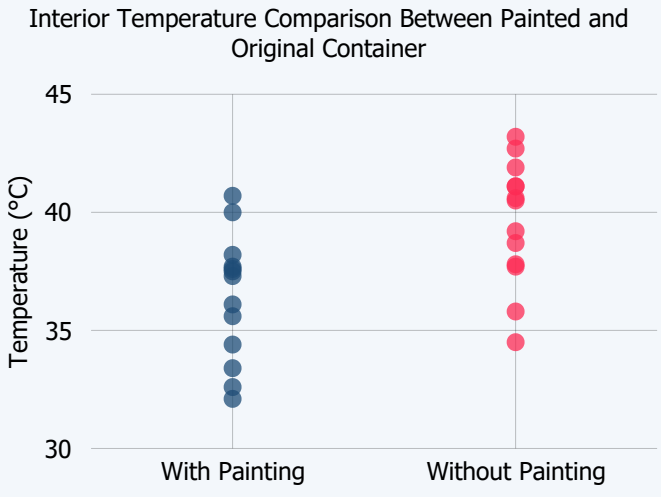
TRIAL 02: Office Container

PasteCool Series 1 + Series 4

Sengkang West Construction Site

~7°C LOWER INTERNAL TEMPERATURE





SUPPORTED BY

SoilBuild

VIEW FULL TRIAL DATA

Scan the QR code to view the full case study

PRODUCT CATALOGUE

A SOLUTION FOR EVERY APPLICATION.

PASTECOOL PAINT



Series 1
Primer

Cooling Performance	★
Material	Acrylic System
Coverage	6-7 sqm/kg
Packaging	5kg, 20kg

Series 2
Primer

Cooling Performance	★★
Material	Silicate System
Coverage	6-8 sqm/kg
Packaging	5kg, 20kg

Series 3
Topcoat

Cooling Performance	★
Material	2-in-1 Acrylic System
Coverage	6-7 sqm/kg
Packaging	5kg, 20kg

Series 4
Topcoat

Cooling Performance	★★
Material	Acrylic System
Coverage	6-7 sqm/kg
Packaging	5kg, 20kg

Series 5
Topcoat

Cooling Performance	★★★
Material	Silicate System
Coverage	6-8 sqm/kg
Packaging	5kg, 20kg

PERFORMANCE COMPARISON

THE PASTECOOL DIFFERENCE.

	Regular Emulsion Paint	Competitor #1* Reflective Cooling	Competitor #2* Radiative Cooling	PasteCool Series 3,4	PasteCool Series 5
Temperature Reduction > 40°C	✕	✕	★	★★	★★★
Overall Energy Savings > 20%	✕	✕	★	★★	★★★
Product Carbon Emission < 2 kg CO_2 eq/FU	✕	✕	✕	★★	★★★
Aging and Durability > 7 years	✕	✕	✕	★★	★★
Total layers of paint < 3 layers	✕	✕	✕	★	★
Finished Surface	$3-$6 /sqm	$4-$7 /sqm	$10-$30 /sqm	$3-$7 /sqm**	$3-$7 /sqm**

*Best known in class performance
**Pricing shown as rough retail price.

01 Exterior temperature reduction can reach over 40°C translating to interior temperature reduction of 5°C.

02 Every 1°C of interior temperature reduction can lead to up to 2% energy savings on air conditioning.

03 Carbon Emission can be saved on 2 fronts. Product Carbon Emission + Emissions Avoided through Air Conditioning savings.

COOLING IS SO SIMPLE.

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