

cool Chemistry





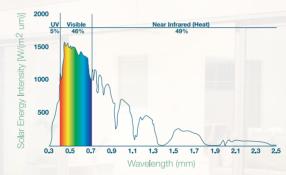
Interpon understands the harsh effects of living under our sun and the energy costs that come with it. That's why we have developed Cool Chemistry technology.

Our Interpon D1000, D1000 Excel and TC powder coating ranges are now available in a unique heat reflective form designed to deflect the sun's rays, decrease temperatures and reduce energy consumption.

## The mechanics behind heat absorption

Energy from the sun is made up of three components, most of which we cannot see.

The energy that determines the color of an object, the visible spectrum, represents only 46% of the sun's



energy. Ultraviolet light (UV) is about 5% of the spectrum and is the energy that can cause damage to our skin.

Infrared light, the invisible portion that contributes to heat build up, represents about 49% of the spectrum.

## Cool Chemistry beating the heat

Interpon Cool Chemistry coatings contain a unique infrared reflective pigment that deflects the infrared light, and its heat, away from the coated substrate.

Products coated in standard powder coating heat up faster and to a greater degree due to their absorption of infrared light than coatings featuring Cool Chemistry technology.

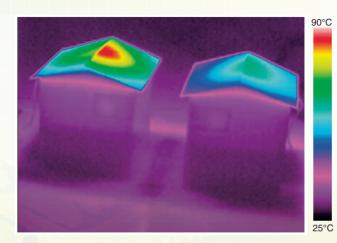
Interpon lab testing, comparing two substrates coated with Interpon D1000 Charcoal Satin, one featuring Cool Chemistry the other a standard coating, showed a significant reduction in substrate temperature on the Cool Chemistry coated metal.

This surface temperature reduction makes Cool Chemistry powder coatings ideal for outdoor metal applications such as street furniture, bus, tram and train stop components, garage doors, balustrades, fencing, playground equipment and virtually any application where substrate temperature is a concern.











## Reducing energy consumption

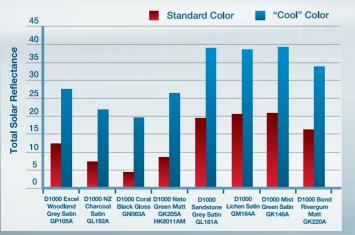
Cool Chemistry not only reduces surface temperatures but lab testing showed a 20 degree surface temperature drop contributed to a 10 degree reduction in internal air temperature within a test model enclosure.

This significant cooling makes Cool Chemistry powder coatings ideal for reducing internal temperatures in heat sensitive areas. Applications such as residential aluminium wall cladding and electrical switch boxes can benefit from the resulting reduction in heat transfer through the substrate.

In these instances the reduced internal temperatures can lower energy consumption and costs by reducing the need for air conditioning and fans.

# Unique infrared reflective pigment

Reflectance levels of Cool Chemistry powder coatings compared to standard powder coatings.





## Cool Chemistry availability

Cool Chemistry is most effective on darker shades due to the natural reflectivity of light colors.

Available in our class leading Interpon D1000, Interpon D1000 Excel and Interpon TC standard colors Cool Chemistry coatings can be applied to a wide range of substrates for a variety of end uses.

Interpon D1000 is the ideal coating for aluminium components, including residential architectural applications when applied by an Interpon D Approved Applicator.

Interpon D1000 Excel is the perfect coating for correctly pre-treated hot dipped galvanised steel, pre-galvanised and galvanised steel as well as alloy castings, making it ideal for a wide range of products.

Interpon TC, with an unlimited color range, is our versatile general purpose coating suited to applications where color retention is not a priority.

All Cool Chemistry products are made to order and available from 20kg through our unique small batch services, MiniB and MiniB *Micro*.

Take advantage of cutting edge technology; reduce substrate temperatures and lower energy consumption with Interpon Cool Chemistry.







#### Interpon powder coatings EVERY COLOR IS GREEN

**SALES & SUPPORT** 

#### **AUSTRALIA**

e: salesoz@interpon.com www.specifyinterpon.com.au

EAST COAST AND SOUTH AUSTRALIA Tel: 1800 630 516 Fax: 1800 650 786

 WESTERN AUSTRALIA

 Tel:
 08 9494 7794

 Fax:
 08 9494 7771

#### **NEW ZEALAND**

e: salesnz@interpon.com www.interpon.co.nz

Tel: 0800 150 527 Fax: 0800 809 679

> green building council australi MEMBER 2010-2011

### Cool chemistry effectiveness

**COOL CHEMISTRY** 

CHARCOAL

SATIN WALL

temp under roof 65°

STANDARD CHARCOAL SATIN WALL temp under roof 85°C+

#### Printed on 100% recycled paper.

Disclaimer - Unless otherwise agreed by us in writing, any contract to purchase products referred to in this brochure and any advice which we give in connection with the supply of products are subject to our-standard conditions of sale. Typical applications for Interpon products are displayed in this publication using representative images. Cool Chemistry® and Interpon® are registered trademarks of Alzo Nobel International BV.

\*Warranty applies to aluminium only when applied by an Interpon D Approved Applicator. A list of current Approved Applicators is available online at www.interpon.com.au