

Technical Data Sheet

Effective: 01.07.2014

Polarcoat System

Polarcoat

100% Solids Specialty Coating
The System consists of:
Polarcoat, and where required,
CompassCoatings Fabric and/or
CompassCoatings Primer.

Description

Polarcoat is a single component, 100% solids, solvent free coating which contains no VOC's (volatile organic content). It forms an extremely smooth and highly durable abrasion, impact and chemical resistant surface. The properties of **Polarcoat**, create optimal conditions to resist the growth and accumulation of bacteria on the easy to clean surface of the coating. Also, the ability to apply the product at low temperatures is setting new standards for this application.

In corners and junctions **Polarcoat** used in conjunction with **CompassCoatings Fabric** creates a monolithic surface, leaving no crevices for the formation of bacteria.

Uses

Polarcoat is successfully used on the interior surface **walls, ceilings** and **floors** of:

- Cold Rooms
- Cold Storage warehouses
- In food handling and food processing rooms. E.g. Abattoirs Bakeries, Supermarket Prep. Areas, Restaurants and Commercial Kitchens

Substrates

- Metal,
- Concrete & Masonry
- Glass, Ceramic & Ceramic tiles
- GRP Panels (Glass Reinforced Polyester)
- Wood *
- Gypsum*

* these surfaces often need priming since they are usually quite porous.

Advantages

Polarcoat offers the following advantages:

- 1-component
 - ready to use
 - solvent free
 - Containers can be resealed for future use
 - can be applied to wet surfaces
 - seamless, monolithic surface
 - no joints
 - no locations for bacteria or germs to lodge
 - Odourless – allowing application in close proximity to food products
 - fast curing from +0°C
- After curing it is resistant to animal fats, blood and aggressive cleaning chemicals with 60°C plus hot water pressure rinsing.
- Contains no VOC's
 - Contains no isocyanates, reducing health concerns
 - Adheres to most building surfaces without priming

Colours

White, Grey
Other colors available upon request.

Note: *Slight variations in colour can occur between batches.*

Application

Surface Preparation

Surfaces must be sound, clean, free of dust and loosely adhering particles, oil, fats, mildew and algae.

Concrete and masonry surfaces should not have a moisture content above 8%. Surfaces should be free of laitence and efflorescence as well as any other deposits that may interfere with the bond to the concrete or masonry.

Before applying **Polarcoat** surfaces must be wiped down with a cleaning fluid such as denatured alcohol or other appropriate cleaning method ensuring that no residue remains.

The product must be gently stirred before use taking care not to entrain air as this will create small air bubbles in the coating which may form small craters on curing. Should this occur allow the product to stand with the lid in place for between 5 and 10 minutes to allow air to escape.

Priming

Metal, Concrete and Masonry, Glass or Ceramic require no priming.

On wood or gypsum surfaces prime surface with **CompassCoatings Primer**. This will prevent any tannin bleed from the wood and will also pre-seal the porous nature of the surface.

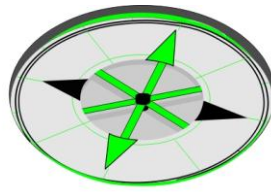
For other substrate not mentioned above contact the customer service line – +49 6751 8567885

Application Instructions

At all junctions between panels, at plane junctions, dissimilar substrates, pipe or conduit penetrations apply **CompassCoatings Fabric** to reinforce these locations.

Apply a moderate coat of **Polarcoat** by brush or roller symmetrically over the joints covering approximately 60mm each side of the junctions (e.g. corners, panel joints, floor to wall and wall to ceiling junctions). Lay in the 100mm wide fabric symmetrically over the joint and imbed using a brush or roller. Make sure that no bubbles or creases appear in the fabric. At the same time apply a moderate coat of **Polarcoat** over the entire area to be treated. Allow to become touch dry (about 2 hours 4°C).

Once touch dry apply a second moderate coat over the entire area. Do not over apply coating to avoid runs on the surface. This will complete the monolithic lining of the treated surfaces. Wall



surfaces will be serviceable in 6 hours and floors walkable in 12 hours. The amount of **Polarcoat** used will be approximately 0.5l/m² total for the entire application. This will, however, depend upon porosity and smoothness of the substrate. (see "Consumption" overleaf)

Note:

For flooring applications the owner or applicator may elect to produce a thicker coating. This will result in greater consumption of **Polarcoat**.

Application Conditions:

Ambient Temperature - 0°C to + 35 °C
Surface Temperature - 0°C to + 35 °C

Note:

Do not apply over frozen matter!

Consumption:

Complete System:
Smooth surfaces - min. 0.5 l/m²
This includes consumption for both coats

Curing Times:

About 2 hours at 4C° and 50% RH
Trafficable after 12 hours at 4°C and 50% RH

Fully cured after 14days.

Resistance to Chemicals

Chemical resistance tests show that cured **Polarcoat** is resistant to many solvents, acids and alkalis like

- Diesel
- Aceton
- Butanol
- Shellsol D80 at 80°C
- White spirits
- Sulphuric Acid 5%
- Sodiumhydroxide 5%
- Animal Fats and Blood
- Commercial cleaning chemicals

It is advisable to allow 48 hours cure before subjecting surfaces to A

ggressive cleaning chemicals.

Cleaning

Uncured **Polarcoat** can be removed with White Spirits. Cured **Polarcoat** can only be removed mechanically.

Storage

Unopened containers:

12 months from manufacture date.

Opened unused Material:

To lengthen the potlife when storing an opened container, pour a 1mm thick film of White Spirits onto the surface of the unused product, before replacing the lid. When reopening for further use, remove any skin that might have developed on the surface and mix gently to create a homogeneous liquid without entraining air bubbles.

Important Notice:

Please always consult our website at www.Compass-Coatings.co.uk to check that you are reading the most up to date data on this product.

Type	Solvent Free Synthetic Polymer	
Shelf life and Storage conditions	unopened 12 Months, Storage Temp. +5 - 32°C	
Application Temperature	+0 - 35°C (Ambient) +0 - 35°C (Surface)	
Total Thicknes (Smooth Surface)	0.4mm to 0.5 mm	
Total weight	ca. 0.75kg at 0.5l/m ²	
Trafficable	after 12 hours at 4°C and 50% rel. humidity	
Density	1 l = 1,5kg	
Drying Time (touch dry)	2 hours at 4°C und 50% rel. humidity	
Full Cure	after 14 days	
Consumption	On smooth even surfaces: about 0.5l/m ² (Surface Roughness, Unevenness and, high absor-bency will consume more product to achieve desired thickness.)	
Container Size / Article	Packaging	Article No.
Polarcoat CompassCoatings Fabric CompassCoatings Primer	Bucket 7,5 kg / 5l	PC8005-02 = White (03)
	Bucket 15 kg / 10l	PC8010-02 = White(03) Special Colours possible upon request
	Roll 100mm x 100m	VS801001
	Bucket 5kg / 5l	CP8003-00

Caution:

Carefully read the Safety Data Sheet for **Polarcoat** before use. Avoid contact with eyes and skin as this may cause irritation. Should contact with eyes occurs rinse for 15 minutes under running water. If swallowed do not induce vomiting and seek the advice of a physician.

Note:

The information contained in this technical data sheet is based upon our experience and is therefore not binding. All data are laboratory values, which may differ in practice. Therefore, these represent no assurance of characteristics. This data is given in order to allow compliance with respective local specificities. The variety of possibilities and the specific project details in combination with the products cannot be handled within the framework of this data sheet. If you have questions, please contact us. It is the user's responsibility to be informed about the characteristics of the products as well as the technical information and proper processing. Please take careful note of all manufacturer's specifications, e.g. information on surface pretreatment.. A specific result cannot be guaranteed due to differing prevailing individual conditions, which can lead to differing result. Preliminary tests are advised to test for the desired result.