

A solar heat re-radiating compound ®

PERMACOOL

Way to cool



PERMACOOL
Create a comfortable
indoor & improving
energy efficiency
in buildings.

A product of
Nano Technology
and Negative
Carbon Footprint



No more sweating & Wetting in your home



Goodbye to Sleepless night



For a new healthy generation



Exchange heat to cool & enjoy winter in summer



Makes your Building energy efficient



Save power, Save Nation

www.permacoolindia.com

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Our Background.

Polychem formulations Pvt. Ltd. started its activities in the field of anti-heat treatment and "Summer Management solutions" related to industries. We have a rich experience of over a decade in this area and our research and innovation is an ongoing process. We have been successful in addressing heat management, with our niche technology especially for the construction industry. Our product was christened PERMACOOL.

What is PERMACOOL?

PERMACOOL is an innovative solar heat re-radiating metallic oxides compound.

What is the purpose?

Improving the efficiency of HVAC (Heating, Ventilation & Air Conditioning) Systems and providing a comfortable environment).

It re-radiates 93.7% of sunrays, resisting solar heat penetration, and drastically reducing indoor temperature build up and helps to reduce electricity consumption and carbon footprint.

It also fills minute cracks in RCC structure and prevents minor leaks.

Is PERMACOOL safe?

YES, Very much safe, The safety of PERMACOOL is well studied and documented by CUSAT (Cochin University of Science and Technology), it is absolutely safe on human beings and pets.

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How it Works?

It's simple. PERMACOOL coated surface is both highly reflective and highly emissive to minimize the heat generated from sunlight.

Is it paint?

No, it's a coating.

Where can it be used?

PERMACOOL can be applied almost on all kind of surfaces including RCC terrace, terrace pressed with tiles, walls, GI and tin sheets, asbestos, fibre tank, PVC, pipe lines, etc...

Where to apply?

Residential Villas & apartments, Commercial & Industrial buildings, Educational buildings, Hospitals, water storage tank, Irrigation canal, cattle & poultry farm, auditorium/convention centre, hotels & resorts, cinema hall, containers, Open deck of Passenger ships, Trains, warehouses, workshops, Portable cabins, buses, etc..

Is PERMACOOL eco-friendly?

Yes Very much, PERMACOOL is water based product, bio-degradable and VOC free. Moreover us have made the packing environment friendly by using very simple recyclable paper bag, and recyclable HDPE bucket to reducing the wastage.

What are the benefits to individual buildings?

Energy savings potential, Cost savings potential, Short payback period, Improved thermal comfort, Improved roof and equipment life. When it comes to energy savings, the power of one can become the power of many.

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Cutting edge technology of PERMACOOL

Concrete is made up of high concentration of calcium oxide/hydroxide/carbonate. Carbonation occurs when carbon dioxide reacts with the concrete and the pH of the environment drops to around 9. In this situation, carbonation becomes rapid, especially in industrial areas and towns where there is lot of exhaust emission from traffic. "PERMACOOL" coating have become a versatile choice to overcome the problem of carbonation.

Bacterial germs, fungi and other potentially 'nasty' micro-organisms 'hate' and can't live in dry, alkaline environments. This property is a distinct advantage. When "PERMACOOL" is used to paint internal walls that need to be aseptic such as sick room/quarantine in residences and other structures there is a marked improvement in the sterility aspect. This distinct advantage is limited only to "PERMACOOL".

How long will it last?

Once "PERMACOOL" product applied, durability may get up to 5-7 years.

Safety Features

Polychem follows all safety standards and regulations laid down by the Government of India in the production of its product PERMACOOL.

SURFACE PREPARATION

Before application, surface should be thoroughly cleaned with fungicide to free from efflorescence, dust, algae, fungi, or any other impurities.

Then clean with normal water with pressure jet and allow to dry well. Previously painted surfaces should be washed out or brushed down.

If the surface is in powdery or flaking condition, it should be removed by scraping or wire-brushing

SURFACE TEMPERATURE

A too high surface temperature during application will lead to too quick drying of the coating, resulting poor adhesion. A too low substrate temperature may cause condensation on the surface preventing adhesion of the coating. Later peeling as consequence.

CRACK FILLING

In case of heat crack, prepare a solution (Base Cap 1 part, Claggy 1 part and water 1 part). Pour the prepared BASE CAP solution in to the crack and fill.

After filling, a paste has to be prepared using "BASE CAP" and Claggy (1:1 ratio) with sufficient water. Mix it thoroughly with the help of Putty mixer and apply this putty upon the crack with the help of putty blade.

Application side including 2 part.
1) BASECAP as Base Coat
2) PERMACOOL as Top Coat

PREPARATION OF BASE CAP SOLUTION

Take 1 Lit. of potable water, add 1 Kg of Claggy and mix thoroughly. Add 1 Kg of Basecap powder in to the solution. Mix well. Now Basecoat is ready to use. Always add powder to liquid and to be applied within 20-30 minutes of preparation

PREPERATION OF PERMACOOL SOLUTION.

Take 1 Lit. of potable water, add 0.5 Kg of Claggy and mix thoroughly. Add 1 Kg of PERMACOOL in to the solution. Mix well. Now PERMACOOL is ready to use. Always add powder to liquid and to be applied within 20-30 minutes of preparation

APPLICATION METHOD

1st Step:- Before application spray water on to the surface for dampness but stagnated water should not be there.

2nd Step:- Pour BASECAP solution on to the surface using mug. Apply hard in circular motion with nylon brush. Keep in stir the solution until the last brush.

3rd Step:- Base coat when "Touch dry", usually after 30 to 45 minutes, apply "PERMACOOL" solution as Top Coat with brush, spray gun or roller. Keep in stir the solution until the last brush.

4th Step:- Next 3 days pour enough water upon Top Coat 3 to 4 times interval. Application should be done early in the morning at moderate temperature. In TIN sheets night time also advisable.

Coverage.

1 Kg of both PERMACOOL & BASECAP is sufficient for 100 sq.ft on concrete with 120 micron DFT. (Actual coverage is depends on the surface condition)



Apply PERMACOOL
to your Roof
&
Become a Climate
WARRIOR



POLYCHEM FORMULATIONS PVT. LTD.

(An ISO 9001:2015, 14001:2015 Certified Company)

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Credentials

