

PLANET SUPRA & PLANET SUPRA NEO

What Type of Paint is PLANET SUPRA? What is its Properties?

Q What happens to the reflected sunlight?

A The sunlight is reflected onto or absorbed by other objects, and eventually returns back to the sky (space).

Q Does the reflection rate differ depending on color?

A Compared to PLANET SUPRA white, the reflection rate of other colors (PLANET SUPRA) is lower, but it is higher when compared to the same color of common paint.

Q Any odor? Ignition point?

A PLANET SUPRA has low odor, and is non-combustible, due to its water-based property.

Q How many years is the paint durable?

A It may vary with environment, but the coating film quality may be maintained for approximately 10 years.

Q What happens to the paint if it becomes 10 years or older?

A It may vary with environment, but there would not be any visible cracks or peelings. However, there may be chalking (white powder is released from the applied surface; making your hand white if touched) The thermal barrier effect of the paint would decrease gradually, but as long as there is no major dirt etc. on the surface, the effect would not greatly decrease.

Q Would there be any instances where hollow beads in the paint will break?

A It is unlikely that there would be issue in the durability of hollow beads. Hollow beads used in PLANET SUPRA is employed in many precision instruments of major companies and it is the same as those used in resin filler, which requires high quality and durable hollow beads.

Q Can PLANET SUPRA protect the roof material?

A We can say that with high reflectance rate of thermal barrier effect, the expansion and contraction of roof material will lessen due to heat diminishment, which can heighten the durability of the roof.

Q Can I mix paint or pigment from another brand to PLANET SUPRA to create a new color?

A No, you cannot. PLANET SUPRA is manufactured with a special process. Therefore, adding/mixing common pigment or paint from another brand to PLANET SUPRA would significantly deteriorate the thermal barrier effect.

On What Types of Material is PLANET SUPRA Applicable?

Q On the product catalogue it says PLANET SUPRA is applicable on metal, concrete, and wood. Are there other materials that can be applied?

A PLANET SUPRA can be applied on most of outdoor walls and roof materials, but cannot be applied on some types of plastics. It is important to accurately confirm the basis material before application. Please feel free to ask about the coatable basis materials.

Q Can PLANET SUPRA be applied on cement board (e.g.Viva Board)?

A PLANET SUPRA is applicable on cement board, a material with cement and wood combined, after sealer is applied.

Q Will painting on tiled roof be effective?

A Thermal barrier effect can be expected if applied on the surface of tiles.

Q Any cases where PLANET SUPRA was applied on heat pipes, water pipes, or oil tanks?

A Heat pipes: test application was done on steam pipes. The surface temperature reduced low enough to be touched by hand (burn prevention).

Tanks: there are test data of application on sulfuric acid tanks and on hypochlorous acid tanks.

Water pipes: none, but it is expected that coating on the water pipes set outside has effect to prevent the pipes from heating up.

Others: iron fence of blast furnace work place (burn prevention) and outdoor flow duct.

Q Any past experience of using PLANET SUPRA in livestock industry?

A We have an experience of painting on cow shed.

Q Any limitations to painting on RC roofs and housing complex?

A Applicable if appropriate sealers and primers are chosen according to basis material.

Q Is there waterproof property to PLANET SUPRA? Can it be applied on ships?

A No, PLANET SUPRA does not have water-proof property.

However, to apply PLANET SUPRA on waterproof rubber sheets, PLANET SUPRA WP is recommended.

Parts of the ship that are in contact with water at all times, cannot be applied.

Applying on places such as decks where people walk around is also not recommended.

However, application on the roofs of the ship is possible.

Q Can I apply PLANET SUPRA on waterproof sheets?

A No, you can not. Waterproof sheets are very high in flexibility.

The elasticity of PLANET SUPRA or PLANET SUPRA NEO is not compatible with waterproof sheets, therefore, if PLANET SUPRA were applied on waterproof sheets, it may form cracks.

On Application

Q Do I need special training to paint?

A Anyone can paint because it is water-based paint. Application specification is also provided in English.

We have not given any special technical training for Japanese paint contractors in the past.

Application can be done with following application manual; however, management of the site is necessary to ensure application according to work instruction.

Q What should be used for dilution?

A Please use distilled or clean water. Solvent such as thinners cannot be used for dilution.

Q There are lumps in PLANET SUPRA after stirring. What shall I do?

A Sometimes lumps can be found in cans which has been in storage for a long time.

If the solids still remain after stirring, filter the paint with large mesh (e.g., Mesh 20) to remove them before application.

Q Will thermal barrier effect improve if many layers are applied?

A PLANET SUPRA is designed to produce an effect with the defined amount. There would not be any difference in the effect even if the thickness of the coating film exceeds 200µm.

Q Will there be any problem if each layer was applied using different tools?

A There would be no problem, but using the same tool for all the layers is recommended.

Q When applied on a very hot day, the paint dried up as soon as it was applied and formed patchy patterns. May I increase the dilution rate?

- A Please keep the dilution rate as instructed. There is no problem even if the 1st layer is patchy. You can add water little by little to adjust viscosity of the paint if it gets too thick.
1. Check that the 1st layer is completely dry. The 1st layer of the coating film would lower the temperature of the painted surface, and make the 2nd layer easier to paint.
 2. When painting the 2nd layer, make sure you paint over the area which became patchy in the 1st layer. (Please see the details below titled "PLANET SUPRA Application on High Temperature Surface")

Q Can I apply another paint on top of PLANET SUPRA?

- A It is possible, but it is not recommended because thermal barrier effect would be lost.

Q Can we walk on the applied surface? If the surface became dirty, will that affect the thermal barrier performance?

- A Walking on the applied surface is not intended. If it is necessary to walk over the surface, wear slippers etc. that has soft, clean sole. Shoes with hard sole may damage the coating film, which may promote deterioration of coating film.
- Any extraneous matters can be a factor to reduce reflection rate, which also may influence thermal barrier performance.

Q Will there be any instances where paint would run off?

- A After PLANET SUPRA is completely dried, it would not run off with rain or cleansing. If it rained or if the surface was cleansed before PLANET SUPRA is completely dry, then it is possible that the paint would run off.

Q It rained before the paint was completely dry. Now there are bubbles in the drain. Is it harmful?

- A When PLANET SUPRA is mixed with excessive water, bubbles form due to surfactant. The bubbles formed in the drain for the same reason; hence it is harmless. However, you will need to repaint the part where the paint was washed with rain.

Q If exhaust from exhaust port was hitting the applied surface, will that effect the paint performance?

- A If the exhaust air is a type that reacts to resin, then it may promote discoloration or deterioration, causing the thermal barrier effect to decrease.
- Also, if the exhaust includes dust, this may also decrease thermal barrier effect.

Q We applied PLANET SUPRA NEO but it seems it takes longer time to dry. When we touch, we get a wet feeling. Is this normal?

- A After the coating film is foamed, plasticizer seeps out, which causes the stickiness on the surface. If your hand touches, fouling (fingerprint etc) will be left, if any objects are left on top, the coating film may transfer to that object. If you leave it under outside condition, the stickiness will be washed away by rain spontaneously. Other immediate ways to do so would be to wash plasticizer with soap and water. However, it won't go away with washing just once, so you would need to wash it multiple times.

On Warranty

Q Are there any expiration date? Any Warranty?

A Please use unopened paint within 1 year from the manufacturing date.
Exchangeable if abnormalities were found in the products manufactured within a year and if the can remained unopened until then.
The quality can be maintained if stirred (can unopened) every 3 months.
To preserve the remaining paint from the last application process, transfer it to a smaller container and use it up as promptly as possible.

Q Do you give warranty to walls/roofs applied with PLANET SUPRA?

A We cannot take responsibility of application, hence we do not give warranty after the paint is applied.
The situation of application greatly affects the outcome of the application, so we cannot give warranty for paint that has become coating film.

PLANET SUPRA Application on High Temperature Surface

In general, the temperature of the roof surface becomes higher than the ambient temperature, and it rises even higher as the roof color gets darker (for example, in Japan, when the ambient temperature is 35°C, the temperature of a roof surface may reach to 70°C).

Below is the guideline for applying PLANET SUPRA under such conditions:

***DO NOT add any water before you stir PLANET SUPRA**

- 1) Be sure to follow the dilution ratio. Otherwise, glass beads will lift above the surface of PLANET SUPRA when stirring, resulting in formation of lumps when applying.
*Dilution ratio - for brush and roller: 0-8%; for spray: 10%
- 2) When using roller and brush, you need to paint quickly.

<1st layer of PLANET SUPRA>

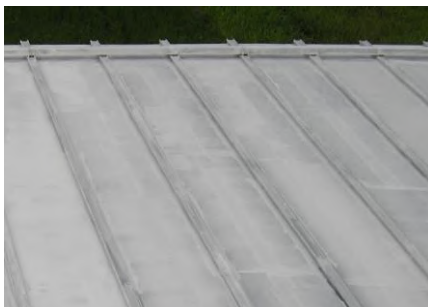
When the roof surface is hot upon application, the paint dries up quickly and would not let you paint evenly. So the finish of the 1st layer will have mottled patterns and will not be even - you can see that some parts are coated thinly but the other thick. But you don't need to worry about it. It is not necessary to add amounts of paint for a beautiful finish on the 1st layer. The key is to paint the first layer quickly. When you feel the viscosity of PLANET SUPRA increasing, you can add a small amount of water to adjust it.

After the 1st layer, the temperature of roof surface rapidly gets lower, making the 2nd layer longer to dry, which makes it easier for you to paint the surface.

<2nd layer of PLANET SUPRA>

Make sure that the 1st layer is dried up completely and you can start the 2nd layer. The dilution ratio is the same as the 1st layer. Paint carefully to cover completely the mottled strips.

<1st layer >



<2nd layer>



PLANET SUPRA 快 Kai

What Type of Paint is PLANET SUPRA Kai?

Q Is PLANET SUPRA Kai different from PLANET SUPRA?

- A PLANET SUPRA Kai is, as with PLANET SUPRA and PLANET SUPRA NEO, thermal barrier paint. However, while PLANET SUPRA and PLANET SUPRA NEO require 2 coats for its maximum effect, PLANET SUPRA Kai requires just one coat.
- Although PLANET SUPRA Kai cannot match the high reflectance rate of PLANET SUPRA and PLANET SUPRA NEO, it has reflection rate of 80% or more. The condition is that PLANET SUPRA Kai can only be applied by spray, to acquire uniform coat thickness of 150µm with one single coat.

Q Is the durability of PLANET SUPRA Kai, the same as PLANET SUPRA?

- A Yes, because PLANET SUPRA Kai is the same acryl emulsion resin paint, it lasts for 10 years, just like PLANET SUPRA.

On What Types of Materials is PLANET SUPRA Kai Applicable?

Q Can PLANET SUPRA Kai be applied on any type of roof?

- A The basic product specification is the same as PLANET SUPRA or PLANET SUPRA NEO. Please refer to their FAQ pages for details.

On Application

※ The application specification of PLANET SUPRA Kai mostly overlaps with PLANET SUPRA and PLANET SUPRA NEO. Please refer to their FAQ above.

Q It says PLANET SUPRA Kai can only be applied using spray. Any kind of spray can be used for application?

- A Airspray: please use a spray with diameter 1.5mm or more. Dilution rate is 10%. The paint can easily separate with dilution. Stir the paint in the cup occasionally to maintain the uniformity of the paint.
- Airless spray: please use a spray with low pressure (8MPa or lower). Dilution rate is 10%.

PLANET SUPRA WP

What Type of Paint is PLANET SUPRA WP?

Q Is PLANET SUPRA WP a waterproof paint that reflects sunlight?

A PLANET SUPRA WP is not a waterproof paint, it is a thermal barrier paint applicable to waterproof materials. It can be applied on elastic waterproof materials, and reflect sunlight without interfering with the waterproof property of the basis materials.

Q What are the color variations?

A 4 colors: white, light gray, ivory, and green.

On What Types of Material is PLANET SUPRA WP Applicable?

Q Would I need base coat if I want to apply PLANET SUPRA WP on waterproof rubber sheet?

A Basically, no base coat is needed for application on natural rubber sheet.

However, there are various kinds of rubber materials, so doing a test application on a small area is recommended.

Test application method: Apply PLANET SUPRA WP on a small area, let it dry for about 2 hours.

If the surface of coating film does not become sticky, PLANET SUPRA WP is applicable on the entire surface. If the surface of coating film is sticky as a result of test application, apply base coat of PLANET SUPRA BASE WP before applying PLANET SUPRA WP.

* Refer to the table below for materials that need base coat.

(Compatibility with Various Rubber Sheets)

No	Type of Rubber	Details	Direct Application	Base Coat
1	EPDM	Ethylene-propylene rubber	○	—
2	CNR	CR+NBR rubber	×	○
3	CR	Chloroprene rubber	×	○
4	NBR	Nitrile rubber	○	—
5	Natural Rubber		○	—
6	Butyl Rubber		○	—

Base coat is necessary for CNR, CR rubber material.

Q As long as base coat is applied, can PLANET SUPRA WP be applied to any type of waterproof material?

A If applying on urethane waterproof material, polyvinyl chloride sheet, polymer cement, apply PLANET SUPRA WP after base coat of PLANET SUPRA BASE WP.

PLANET SUPRA GLASS

What Type of Paint is PLANET SUPRA GLASS?

Q Any heat-keeping effect during winter?

A Heat-keeping effect cannot be expected. PLANET SUPRA GLASS reflects infrared rays and absorbs the heat, and releases little heat indoors while releasing most of it outdoors.

Q It says the life span is 10 years, but how does it deteriorate? Will it peel off? Would you recommend repainting?

A PLANET SUPRA GLASS would not suddenly peel off. The surface of PLANET SUPRA GLASS is resin film, so it would deteriorate with ultraviolet ray and will turn yellowish or clouded. When deterioration is found, repainting would be recommended after the old paint is removed.

Can PLANET SUPRA GLASS be Applied on Any Kind of Glass Surface?

Q Can PLANET SUPRA GLASS be applied on frosted glass or wired glass?

A PLANET SUPRA GLASS can be applied on frosted glass, but the unique texture of frosted glass may be ruined. On the other hand, PLANET SUPRA GLASS cannot be applied on wired glass. This is because PLANET SUPRA GLASS has the property to absorb heat on the surface to prevent it from entering inside. Hence, in the case of wired glass, glass and the wire inside may heat up, causing the glass to crack due to the difference of its heat expansion rate.

Q Is PLANET SUPRA GLASS applied on the glass surface facing inside?

A Yes, it is applied from the inside.

If PLANET SUPRA GLASS is applied on the outer surface, litter and other extraneous matters may stick to the surface before it dries, which can make the surface vulnerable and difficult to maintain aesthetics. If paint can be applied from the inside, there is less possibility of the above conditions and it also means that there is no need for scaffolding, so the cost for construction can be saved.

Q Can it be used onto windshield of cars?

A There would be no problem with the transparency, but the metal contained in the coating film may interfere with electric waves from the outside, if there are any receiving apparatus (e.g., ETC) inside the car.

On Application

Q What is the recommended method for repainting?

A Spray IPA (isopropyl alcohol) onto the surface to soften the coating film, and scrape them off using a scraper. Wipe off IPA after done with scraping. If painting immediately after this process, pretreatment of polishing would be unnecessary.

Q How long does it take for the odor to disappear?

A During application, keep ventilating, and leave the door open for 24 hours or more to let the odor out. PLANET SUPRA GLASS is a volatile paint; if it volatilizes, there would be no smell left in the room.