



MAINTENANCE ENGINEERED - NANO PAINT - NO VOC



Product Sheet and Technical Information

Product code	Nanopaint NP-605
Product description	Ecological paint manufactured by nanotechnology, environmentally friendly, based on water, for direct painting over rust, the product contains one element, the paint is used both as basic paint and for finish, non-toxic, the product does not emit toxic fumes, it is easy to apply, it prevents combustion, it corresponds with c2-c5m
Special features	The chemical elements in the paint directly act on rust. The paint inserts microns into the metal and uses rust as part of the protection layer to prevent the development of fresh rust. The paint has strong adherence abilities and is excellently flexible.
Uses	The paint is designated for direct painting over rust on infrastructures located in harsh marine environments, in closed rooms and in facilities sensitive to explosives and flammables; painting metal parts under extreme weather conditions – in civilian infrastructures, health and transportation institutions and industrial plants.
Instructions prior to use	Prior to use, the product should be properly mixed, manually or in a mixer, in low speed, so that no foaming occurs and no air bubbles are formed.
Preparing the area for painting	Removal of rust residues and old paint with a hard brush or a water pressure jet (20) bar. The dust and oil residues should be removed and cleaned with water pressure and soap to decompose the oils.
Emphases for direct painting over new galvanized metal	It is recommended to slightly roughen new galvanized metal in order to increase the contact area for maximal adherence ability. Dirt residues which result from the roughening activities should be cleaned with a water jet and soap.
Application tool	Brush / roller / airless / paint sprayer Do not use application tools which were previously used with materials based on solvents and thinners.
Recommended application temperature	Between 7-35 degrees Celsius
Resistance temperature After drying	Between -59 degrees Celsius and 250 degrees Celsius
Thinning the paint	Ready-to-use paint (if necessary, it can be thinned with up to 5% water)
Finish	Mat
Shades	EX Stock Grey & White. Other Colors like Green, Red, Yellow and any custom Shade On order basis

PERMAWELD – ECC (Environmental Corrosion Control) Division

Akarsh Plaza, 227, 1st Stage, 5th Phase, Shivanagar, W.O.C.R. Bangalore - 560 010, Karnataka, INDIA
E-mail: permaweld@permaweld.com | Web: www.permaweld.com.

A True Maintenance Paint from Permaweld ... 28 years making Maintenance a profit centre



MAINTENANCE ENGINEERED - NANO PAINT - NO VOC

Product Sheet and Technical Information



Product code	Nanopaint NP-605
Drying time Between layers (25 degrees)	Two hours only
Thickness of film per layer	40-60 micron
Capacity of coating per layer (sq. m. per liter)	9-13 sq. m.
Thickness of final application film with rough rust	250 micron
Painting with airless	A professional Desa airless device can be used to paint 0.19-0.21 inch
Painting with paint sprayer	A professional and quality Desa paint gun (preferably that used for painting vehicles) to use on 1.6-2.2 mm.
Cleaning the tools	With lukewarm water immediately after use, soap can also be used.
Direction of paint sprayer	The spraying device should be directed to release a minimum amount of air but sufficient paint for a full coating of the area. In addition, the beam of paint should be directed in relation to the air and the area which we would like to paint.
Resistance	The paint is resistant when it comes in contact with most chemicals, seawater and crude oil and gas products. It can also withstand extreme weather conditions. It is not resistant to acetone and to solvents.
Application environment	Do not apply the product approximately 48 hours prior to expected rain, under dusty conditions and during a sandstorm.
Transportation, storage and validity instructions	The paint must not be transported under a temperature below 2 degrees Celsius. The product should be stored in a shaded and cool place. The product is valid 18 months in its original and sealed package.
Duration of drying process for contact, between layers and final	Duration of drying process for contact – approximately 30 minutes, between layers -120 minutes and final – 14 days.



PERMAWELD – ECC (Environmental Corrosion Control) Division

Akarsh Plaza, 227, 1st Stage, 5th Phase, Shivanagar, W.O.C.R. Bangalore - 560 010, Karnataka, INDIA
E-mail: permaweld@permaweld.com | Web: www.permaweld.com.

A True Maintenance Paint from Permaweld ... 28 years making Maintenance a profit centre



ENVIROSAFE
CORROSION COATING



MAINTENANCE ENGINEERED - NANO PAINT - NO VOC

NP
The Future of Paint
NANOPAINT



Instructions for Using Nanopaint NP-605

An advanced system for direct painting over rust, ecological and environmentally friendly, based on water, simple and convenient



General

1. The paint is packed only in plastic containers.
2. The paint can be diverse according to the customer's demand.
3. It is best to use the paint within 12 months from the date of manufacture.
4. The paint is ready to use. Thinning is not necessary.
5. The paint is based on water, and it should be stored in a shaded place. The recommended storage temperature is between 5-40 degrees Celsius.
6. During storage, the layer of liquids may separate from that of the solids, a process which is completely normal.
7. Prior to using the product, please mix properly either manually or in a mixer. The speed should be low, so that no foam or air bubbles are produced.
8. If any foam or air bubbles are produced, please wait about 15 minutes prior to use.
9. If the paint is transferred into any type of spraying device, it should be poured slowly and slid on the walls, so that no foam is produced.
10. Drying duration for touch and between the layers: Between 1-3 hours. Final drying duration: 7 days.

Tools for using Nanopaint

1. Air compressor with minimum pressure of 4 atmospheres.
2. Quality and professional paint gun (preferably the one used on vehicles) manufactured by Desa for the use of 1.6-1.7 mm.
3. Alternatively, a professional airless tool manufactured by Desa for the use of 0.19-0.21 inch.
4. A tool which accurately checks the thickness of the color.
5. High pressure washers for the production of water pressure of at least 15 bars.

PERMAWELD – ECC (Environmental Corrosion Control) Division

Akarsh Plaza, 227, 1st Stage, 5th Phase, Shivanagar, W.O.C.R. Bangalore - 560 010, Karnataka, INDIA
E-mail: permaweld@permaweld.com | Web: www.permaweld.com.

A True Maintenance Paint from PermaWeld ... 28 years making Maintenance a profit centre

6. A professional tool for mixing the paint or a rotation controlling handle to install on the drill (a knife handle and not a spiral).
7. A soap to remove oils, solvents and other types of dirt for a proper preparation of the area.

Preparing the metal for painting

1. Prior to beginning the preparation of the metal for painting, it is recommended to check the painting surface, in order to identify the important elements to be taken care of, such as old paint, rust residues, connections and welding areas wrapped with materials of fusion, oil residues and other kinds of dirt which may prevent the paint from covering the serviced metal and adhere to it.
2. The painting surface must be rinsed with a high pressure washer at a pressure of at least 15 atmospheres, in order to completely remove rust residues, old and damaged paint, seaweeds and scum, and any other kinds of dirt which may prevent the direct adhering of the applied paint on the metal.
3. The high pressure washer can also be used with seawater.
4. If any residues of oil, grease or solvents still remain, the right soap should be used to dissolve and remove them.
5. Do not paint on silicon based paints, such as Hemereit / Hemerton, etc.
6. Please do not paint over an old and damaged painting system. However, in cases where the old paint is based on polyurethane or epoxy and firmly adhered to the metal without any air pockets which may contain hidden rust, the protection system of Nanopaint will be applicable.
7. If the painting surface is extremely smooth and it does not contain any rust whatsoever, it should be scraped off with sandpaper or a steel brush in order to create a better base for the adhering process.
8. It is important to remember: The system operates better when it comes in direct contact with metal, even if it is rusty.

Painting the surface

1. It is important to ensure the following: The painting system of Nanopaint is based on water, and it is extremely sensitive to solvents and thinners. Therefore: Do not use painting tools which were used before with paints based on thinners and solvents.
2. After preparing the surface, please mix the paint properly and slowly with mixer knives or manually until you receive full homogeneousness between the liquids and the solids.
3. The paint should not be thinned, but under extreme weather conditions and if necessary, only with water up to 10%.
4. The spraying device should be adjusted, so that it will spray the least amount of air, but, at the same time, fully cover the area. In addition, the beam of paint should be directed according in relation to the air and the area which you would like to paint.

PERMAWELD – ECC (Environmental Corrosion Control) Division

Akarsh Plaza, 227, 1st Stage, 5th Phase, Shivanagar, W.O.C.R. Bangalore - 560 010, Karnataka, INDIA
E-mail: permaweld@permaweld.com | Web: www.permaweld.com.

A True Maintenance Paint from Permaweld ... 28 years making Maintenance a profit centre

5. The first layer should be sprayed at a thickness of 40-60 micron. Actually, it depends on how much you are familiar with your painting device. Usually, you spray the surface three times in order to receive the layer thickness you desire
6. After the paint layer is dry, which may take up to 120 minutes, the obtained thickness should be checked and you should do the same with the next layers.
7. Spray a total of 3-5 layers at an interval of 120 minutes between each layer.
The aforementioned should be carried out while considering the weather conditions, in general, and the external temperature and the humidity levels, in particular. The recommended thickness should be at least 180 micron before the top layer is applied.
8. Recommended application temperature – 7-30 degrees.
9. Do not apply the paint 48 hours before rain is expected.

PERMAWELD – ECC (Environmental Corrosion Control) Division

Akarsh Plaza, 227, 1st Stage, 5th Phase, Shivanagar, W.O.C.R. Bangalore - 560 010, Karnataka, INDIA
E-mail: permaweld@permaweld.com | Web: www.permaweld.com.

A True Maintenance Paint from Permaweld ... 28 years making Maintenance a profit centre