

Table of Contents

Features	2
Base	2
Corrosion protection	2
Detailed Application Instructions	4
Application with a brush	4
Application with roller	4
Application with paint sprayer	4
Electrostatic Spraying	5
Recommended pistol/pump filters	5
Dipping	6
Drywall finishing	6
Surfaces	6
Iron & Steel	6
Rusted Steel	6
Weathered Galvanized Steel	7
New Galvanized Steel	7
Aluminum (Light metals)	7
Plastics	7
Other Surfaces	7
Temperatures	8
Drying times & Overcoating	8
Certifications	10
Colors	12
Chemical resistance	13
Gloss level	13
Dry matter content, etc.	13
Storage	14
Thinning	14
VOC	15



FEATURES

- Single component
- Very high adhesion
- Very high elasticity
- Excellent filling properties
- Excellent coverage
- Excellent edge coverage
- Very economical
- Highly resistant
- Very low solvent content
- Very versatile (primer, intermediate and top coat in one)
- Can be used on almost all surfaces
- Very fast drying

BASE

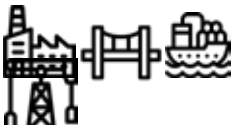
- polyester resins with environmentally friendly, active, multi-phase anti-corrosive pigments
- lead, chromium, and zinc free
- solvent free for aromatic hydrocarbons (e.g., free of xylene or toluene)



CORROSION PROTECTION

Power Coat 3 in 1 meets the requirements of DIN-ISO 12944-6 for all six corrosion categories in atmospheric environments on steel (Sa 2 ½) and manually cleaned steel (St 2). According to DIN-ISO 12944-6, the expected service life for corrosion categories C-5-I (extreme industrial environment) and C-5-M (extreme maritime environment) is more than 15 years with a 3-coat system. In corrosion categories C-1 (negligible), C-2 (light), C-3 (moderate) and C-4 (severe), the longest expected service life is achieved with a 1-coat or 2-coat system. According to DIN 12944-5, Power Coat 3 in 1 is approved as a primer on steel surfaces (cleaned to Sa 2 ½ or St 2), (Section 5.1.2.1), and also for the maintenance of previously painted surfaces according to Section 5.1.2.2. According to the requirements of DIN 12944-1 Section 5 (see also 12944-5 Section 5.3), Power Coat 3 in 1 does not contain any substances that are harmful to the environment. According to the requirements of DIN 12944-1 Section 5 (see also 12944-5 Section 5.3), Power Coat 3 in 1 does not contain any toxic or carcinogenic substances and has a low solvent content (VOC).

To achieve the expected service life and/or corrosion category in DIN EN ISO 12944-6 for iron and steel, it is recommended to apply the dry film thickness defined in the table below. On uneven surfaces, a thicker dry film must be considered. Thicker layers or rapid application of new coats significantly increase the curing process. To speed up the drying process, Vedheftsgrunner Spesial or Nitrofest can be used as a primer or intermediate coat. For long-term exposure under water, Durasolid is recommended over 3 in 1.

Class	Requirement		Service Life				Area of Use
	DFT	MAS	Short	Medium	Long	Very long	
			< 5 years	< 15 years	> 15 years	> 25 years	
C1							
Low	>60	1	■				Indoors: heated buildings with normal ambient air, e.g. office buildings, schools, hotels, shops Outdoors: n/a 
Medium	>60	1		■			
High	>80	1			■		
Very high	>160	2				■	
C2							
Low	>60	1	■				Indoors: buildings without heating Outdoors: rural areas 
Medium	>80	1		■			
High	>160	2			■		
Very high	>160	2				■	
C3							
Low	>80	1	■				Indoors: industrial buildings with high humidity, e.g. laundries, breweries, dairies Outdoors: urban and industrial areas 
Medium	80–160	1–2		■			
High	160–240	2–3			■		
Very high	>240	3				■	
C4							
Low	80–160	1–2	■				Indoors: chemical production, swimming pools Outdoors: industrial and coastal areas with moderately salty air 
Medium	>160	2		■			
High	>240	3			■		
Very high	>320	4				■	
C5							
Low	160–240	2–3	■				Indoors: buildings with constant condensation Outdoors: industrial and coastal areas with high salt content in the air 
Medium	160–240	2–3		■			
High	240–320	3–4			■		
Very high	>400	5				■	
CX	>400	5				■	Indoors: buildings with constant, extremely high condensation Outdoors: offshore 

DFT: Dry film thickness

MAS: Min. number of coats to achieve DFT

Service life: Number of years until first maintenance



DETAILED APPLICATION INSTRUCTIONS

When applying with a brush or roller, thinning is not usually necessary.

For air spray application: 30–35 sec (equivalent to $\pm 10\%$ Power Coat Kombitynner), nozzle size 1.5–2.0 mm – larger openings require less thinning.

High-pressure spraying: Viscosity 90–120 sec/DIN 4 mm at minimum 180 bar (equivalent to $\pm 3\%$ Kombitynner), nozzle opening 0.013–0.021", spray angle 40–80°, thin only if necessary.

Please refer to the product's Safety Data Sheet for information on use and storage, e.g.: The product is flammable. Heating may cause the formation of flammable and explosive gas mixtures. Do not eat, drink or smoke while working. Ensure good ventilation. Take precautions against static electricity.

1. Stir well until the paint has a smooth consistency.
2. Always check that the color is correct.
3. Apply generously and evenly.
4. Never mix other additives into the paint than those indicated by the manufacturer.



Application with a brush

The paint is applied with a standard round, oval, or flat brush (industrial quality). DFT 40–80 μm can be achieved. The next coat can be applied after 1–2 hours (avoid excessive brush use to prevent color bleeding when applying different colors). Colors containing iron mica can be easily applied in up to 100 μm DFT.



Application with roller

It is recommended to use a short-haired synthetic roller (up to 12 mm), nylon, suitable for two-component paints. DFT of 40–60 μm can be achieved. Foam rubber rollers should not be used.



Application with paint sprayer

The table below contains guidelines for paint sprayer application. Follow the instructions provided by the equipment supplier. If necessary, we strongly recommend using Power Coat Kombitynner (listed as "KT" in the table). It is easy to achieve DFT values ranging from 50 μm (small objects, air atomization) to 125 μm (larger objects, airless).

	Viscosity in seconds DIN cup 4 mm and thinning percentage					
	3 in 1 standard colors				3 in 1 with ferrous mica	
	Small items		Large items		Large items	
Air pressure 4-5 bar						
Opening 1,4 – 1,7 mm	20 – 30 sec	15% KT	—	—	—	—
Opening 2,0 – 2,5 mm	30 – 60 sec	10% KT	30 – 60 sec	8 – 10% K-T	60 – 80 sec	10% KT
Opening 2,5 – 3,5 mm	—	—	80 – 120 sec	3 – 5% K-T	± 120 sec	3% KT
High pressure min. 150 bar						
Tip size 17/40 – 19/40	—		80 – 100 sec	3 – 5% KT	± 120 sec	5 – 10% KT
Tip size 21/40 – 23/40	—		—	5% KT	—	3 – 5% KT
Tip size 25/40 – 27/40	—		—	Ikke tynning	—	Ikke tynning
Air mix 90/3 bar						
Opening 0,2 – 0,5 angle: 40°	60 – 90 sec 5 – 8% KT		60 – 90 sec 5 – 8% KT		90 sec 10% KT	
HVLP 5/1 bar						
Opening 1,6 – 3,5	30 sec ± 15% KT		30 sec ± 15% KT		30 – 60 sec ± 15% KT	



Electrostatic Spraying

- Power Coat 3 in 1 can be applied with electrostatic spray equipment (both airless and air atomization). The paint has an electrical conductivity of >100 k-Ohm. Use thinner according to the equipment supplier's specifications.
- Power Coat 3 in 1's electrical resistance is 1500–2500 kΩ. When thinned to airless viscosity (approx. 80–90 sec/DIN 4 mm), this value will decrease to 1000–1800 kΩ; for air atomization (approx. 30–35 sec/DIN 4 mm), the value will decrease to 1000–1500 kΩ.
- Aluminum and mica-containing iron oxide cannot be applied with electrostatic equipment. Values: RAL 9007 approx. 3000 kΩ, high pressure approx. 2000 kΩ, air-assisted approx. 1500 kΩ, RAL 9006 approx. 20,000 kΩ, high pressure approx. 18,000 kΩ, air-assisted approx. 10,000 (cannot be adjusted by the manufacturer).

Recommended pistol/pump filters

Filter	Material type	Tip size
180 – 200 mesh/cm ²	0,084 mm for extremely thin materials	0,007" – 0,013"
100 mesh/cm ²	0,14 mm for regular to high viscosity paints	0,011" – 0,019"
50 mesh/cm ²	0,32 mm for zinc-rich and iron mica oxide pigmented paints	0,015" – 0,025"
30 mesh/cm ²	0,5 mm for thick materials such as bitumen	0,027" and larger

Use a 50 or 100 mesh filter with Power Coat.



Dipping

- Due to the basic properties of Power Coat 3 in 1 such as drying time, applicability, etc., the paint is also suitable for dipping. Little sediment in the dip tank.
- Viscosity requirements will depend on the object and the dipping system, normally 20–35 sec/DIN 4 mm. Adjust the viscosity with a special “dipping” thinner.
- It is recommended to stir the dip tank slowly and continuously; stirring the entire tank once or twice a day is considered sufficient (based on practical experience).
- Annual consumption should be at least twice the contents of the dip tank.



Drywall finishing

- Power Coat 3 in 1 can be applied to all available types of drywall compound as long as they are completely dry. No incompatibilities are known; Power Coat 3 in 1 showed excellent adhesion to all tested commercial drywall compound types.
- It is not recommended to apply drywall compound on top of 3 in 1 (it is too flexible for single-component fillers and is severely attacked by the styrene in two-component polyester drywall compound). Power Coat Nitrofest or Adhesion Primer may be more suitable.



SURFACES

Iron & Steel

- Remove loose rust, rust flakes, scale, oil, grease, and all other impurities in an appropriate manner. Apply the paint to a clean and dry surface.
- Always consider the environment, apply one or more coats with a brush or roller (no thinning required). When applying with a spray gun, refer to the table on corrosion protection and the table under “Application” in the Product Data Sheet.
- The service life of the paint increases with thicker total film thickness. In practice, up to 3 coats are recommended, but this will depend on the environment in the area.
- With the correct application method, a wet film thickness of 150µm can be achieved on vertical surfaces without sagging.

Rusted Steel

- Remove loose rust, rust flakes, and scale. A solid surface is required for optimal and long-lasting results (minimum surface treatment requirements: up to St 2; ISO 8501-1; 1988). Contaminants (oil, grease, salts, and detergents) must be removed by thorough cleaning/rinsing.
- Power Coat 3 in 1 has good penetrating properties. To stop further rust formation on rough surfaces, a sufficiently thick paint film (at least one extra coat) is recommended.

Weathered Galvanized Steel

- The entire surface must be thoroughly cleaned and degreased. Take care to remove all loose particles, especially zinc salts (white rust). Rinse with plenty of clean water. Apply a sufficiently thick film to already rusted and rough surfaces.

New Galvanized Steel

- Create a weak profile; no adhesive primer is required. Degrease and clean the surface using a water-based cleaning agent. Rinse with plenty of clean water.
- Take care to remove zinc salts (white rust). Do not sand with steel wool; preferably use a plastic abrasive, e.g. Scotch Brite or similar.
- The paint must only be applied to a thoroughly prepared, clean and dry surface, free of grease, oil and all other contaminants. Apply sufficient film thickness (min. 60µm TFT) to achieve good adhesion and long-term protection.

Aluminum (Light metals)

- Remove loose rust, rust flakes, and scale. A solid surface is required for optimal and long-lasting results (minimum surface treatment requirements: Up to St 2; ISO 8501-1; 1988). Contaminants (oil, grease, salts, and detergents) must be removed by thorough cleaning/rinsing.
- Power Coat 3 in 1 has good penetrating properties. To stop further rust formation on rough surfaces, a sufficiently thick paint film (at least one extra coat) is recommended.

Plastics

- Clean and degrease thoroughly. Check compatibility with application of 3 in 1. Power Coat 3 in 1 is very suitable for most plastic materials such as PVC window frames, GRP (glass fiber reinforced polyester), previously painted surfaces, etc.
- Surfaces that are not as suitable are "soft" plastic materials such as polyethylene (= polyolefins), Plexiglass (acrylics) and polystyrene. These may dissolve, but can be painted over.
- Always test in small area before applying to entire surface.

Other Surfaces

- There are many other types of surfaces where Power Coat 3 in 1 is well suited. Due to its elasticity, the product can be used on wood if a penetrating paint is not required. Power Coat 3 in 1 even shows good adhesion properties on glass. On concrete floors, a 1:1 mixture with Power Coat Nitrofest is recommended. In some cases, Power Coat Curing Additive for 3 in 1 can be added to achieve a durable floor that can be used shortly after application.
- Properly applied powder coatings can be painted over with Power Coat 3 in 1 without any problems. As there are different qualities of powder coatings, it is not possible to give any recommendations; in some situations, other solutions may be preferable. 3 in 1 adheres very well to anodized aluminum. To achieve a good film thickness, priming with Power Coat Adhesion Primer is recommended.



TEMPERATURES

- During application, the optimum temperature for the structure and surroundings is around 20°C. The temperature should be between +2°C and +30°C, with a maximum humidity of 85%. At higher temperatures, the drying time will be shorter, but not the curing time. The drying time can be delayed (in summer) by using Power Coat Spesialtynner (curing will not be delayed).
- At very low temperatures: Apply "warm" paint or add some thinner.
- Power Coat 3 in 1 can be applied even at very low temperatures, down to -10°C. The drying time will then increase, and the flow properties will deteriorate. Do not use on ice or frost.
- The fully cured paint shows very good heat resistance. Practical experiments show that exposure to dry heat up to a maximum of 300°C has no effect on the quality of the product. However, depending on the color, some color change can be expected at temperatures above approximately 120°C. For temperatures above 200°C, RAL 3009 oxide red is recommended, and up to 250°C, RAL 9006 light aluminum and RAL 9005 black are recommended.
- Temperature shocks (e.g. sudden changes from +250°C down to +5°C (cold water), from +70°C down to -20°C and extremely low temperatures (down to -50°C) have no negative effect on the paint.

Temperature resistance

<120°C	all colors
120 – 200°C	dark colors
200 – 250°C	RAL 3009, RAL 9006, RAL 9005, RAL 9011
250 – 300°C	RAL 3009



DRYING TIMES & OVERCOATING

- Power Coat 3 in 1 is an air-drying paint and is normally applied without a curing accelerator.
- The drying time depends on film thickness, ventilation, relative humidity, and air temperature.
- Thicker coatings can easily be applied in one coat. However, this will significantly increase the drying time. 3 in 1 undergoes a thermoplastic reaction within a few days and cannot be sanded.
- A thick coat or several coats applied in a short period of time will generally increase the total drying time. It is recommended to apply a thin coat first, followed by a thicker coat.
- Adhesion increases even after approx. 3 days (completely dry). During this drying time, objects must not be stacked. If 3 in 1 is used as a primer, it can be mixed with Power Coat Nitrofest.
- If the paint is exposed to liquid for a long time (e.g. rain on a horizontal surface) during curing (up to 5 days after application), it may develop moisture spots.
- Fresh air ventilation will shorten the drying/curing time, while forced drying with hot air above +30°C will delay curing.
- Power Coat Curing Additive for 3 in 1 reduces the drying time (not touch dry) and significantly increases resistance to damage (especially in dark colors). The addition should be 5–10% and only for top coats (not recommended for primers), and the mixture should be used within one working day. Do not use Curing Additive for 3 in 1 together with metallic or iron mica paints (RAL 0610, RAL 9006 and RAL 9007).

Drying time at 20 °C and 65% R.H.

Touch dry	20-30 min
Recoating	After 90 min
Recommended recoating time	approx. 120 min
Use dry	min. ±100 min
Fully cured	min. 3 days
Fully dried	± 8-10 hours

When planning to recoat Power Coat 3 in 1 with two-component epoxy and polyurethane paints, it is recommended to wait 24 hours to avoid boiling or breakthrough due to aggressive solvents. Under normal conditions, an interval of 2 hours is sufficient. In changing weather conditions or at low temperatures, the surface can be recoated when dry to the touch. If in doubt, wait until the day after.

Recoating intervals at 20°C/65% relative humidity

Primer	Top coat	Min.imum	Recommended
3 in 1	3 in 1	15 min.	> 2 hours
3 in 1	Robust-Lakk	15 min.	> 2 hours
3 in 1	S-Glasur	30 min.	> 2 hours
3 in 1	Alkyd paint	30 min.	> 1 hours
3 in 1	Water-based paint	2 hours	> 5 hours
3 in 1	Nitrocellulose lacquer	5 hours	> 8 hours
3 in 1	Two-component acrylic	12 hours	> 24 hours
3 in 1	Two-component epoxy	24 hours	> 24 hours
3 in 1	Two-component polyurethane	16 hours	> 24 hours
3 in 1	PVC (vinyl)	15 min.	> 2 hours

- Power Coat 3 in 1 becomes a dirt-repellent eggshell surface (semi-gloss) when dry; normally two coats are sufficient. No additional top coat is required.
- Power Coat 3 in 1 can be recoated with itself as many times as desired (no matting/sanding required).
- If necessary, Power Coat 3 in 1 can be recoated with all types of single-component paints and with several (tested) two-component paints. However, certain types of paint will require 3 in 1 to dry longer than usual (fast-drying two-component thick film epoxy and adhesion primers with a dry matter content <10% are not suitable as top coats for 3 in 1). The table above provides guidelines (minimum intervals and recommended intervals). Overcoating is possible at any time without sanding/use of sandpaper.

CERTIFICATIONS



NORSOK M-501 system 1 certified

3 in 1 (3 x 100 µm) meets the requirements of NORSOK M-501, revision 6, system 1 based on 4,200 hours of testing including grid cut test, salt spray, condensation, UVA in +60°C to -20°C.



TÜV

Power Coat 3 in 1 has successfully passed all TÜV corrosion resistance tests for lead- and chromate-free paints. The manufacturer's quality control system has been approved by TÜV.



DB (Deutsche Bahn = German Railway)

Power Coat 3 in 1 has undergone extensive testing as a replacement for lead-based primers and is approved for the protection of steel structures (Material No: 672.05 according to TL 918 300 T2). Power Coat 3 in 1 exceeds the requirements for PVC paints according to DB-TL 918 300 BL 77. It has undergone extensive testing by IKS, both short-term and long-term testing.



CONTACT WITH FOODSTUFFS

Power-Coat 3 in 1 can be used for application inside storage tanks and processing equipment for foodstuffs, in accordance with the requirements of German health authorities – tested by Dr. Kittel's official independent laboratory.



TOYS

Power-Coat 3 in 1 can be applied to playground equipment or toys that are normally chewed or sucked on and come into direct contact with the skin (tested according to DIN 53160). The test results showed pH values between 2.4 and 8.8.



ANTI-SLIP

For stairs, floors, etc., we recommend applying RAL 9007 or DB 0601 (or a mixture of these colors). The rough dried paint will provide an anti-slip effect.

To achieve a non-slip coating, we recommend adding Power Coat Slide-Stop Additive to the paint. This provides significantly better slip resistance compared to paints containing iron mica. One 750 ml can is sufficient for 5 liters of paint. See separate product data sheet.



ELECTROSTATIC CONDUCTIVITY

The electrical conductivity of Power Coat 3 in 1 makes the paint suitable for use on the exterior of storage tanks for petroleum products. Values: RAL 7032 = 0.04 x 106 kΩ; RAL 9006/9007 = 0.02 x 106 kΩ.



FRENCH EMISSION CLASSIFICATION FOR INDOOR AIR

Power Coat 3 in 1 is A+ certified. It does not emit any harmful gases when applied indoors.

CLASSIFICATION IN ACCORDANCE WITH DIN 4102-1

Power Coat 3 in 1 meets the requirements of "Baustoffklasse B2" (building material class B2).

DIN-TESTS – POWER COAT 3 IN 1

- Adhesion: Tested in accordance with DIN 53151, alternatively DIN-EN-ISO 2409
- Salt spray test: Tested in accordance with DIN 53167, 50021 SS, 53210, 53209
- Condensation water test: Tested in accordance with DIN 50018 KFW 2.0 S, 50018 SFW 0.2 S and DB-TL
- Impact resistance test: Tested in accordance with DIN 53154
- Abrasion resistance: Tested in accordance with DIN 53233
- Elasticity: Tested in accordance with DIN-EN-ISO 1520, as well as several other tests
Flexibility: Elongation test in accordance with DIN-EN-ISO 1519

MARITIME MARKING

Power Coat 3 in 1 is approved for floating markings such as buoys, etc. (WSV approval).

PRODUCT CODE FOR PAINT IN ACCORDANCE WITH GISBAU

Primer, colored, solvent-based, without aromatic hydrocarbons: M-GP02.

Top coat, solvent-based, free of aromatics: M-LL01.

CLASSIFICATION ACCORDING TO VDL-RL 01 PAINT FOR THE CONSTRUCTION INDUSTRY

Metal protection, corrosion resistant primer, semi-gloss top coat, free of aromatic hydrocarbons.

Directive 2000/53/EC (vehicle destruction)

Directive 2002/95/EC (electrical and electronic equipment)

Power Coat 3 in 1 complies with the regulations.

VOB / DIN 18363

Power Coat 3 in 1 is approved for all types of steel surfaces and is suitable for application on most metal surfaces. For use in accordance with DIN 55928 Section 5 Table 5 (Duplex systems), excellent practical results are available. Requirements in accordance with DIN 55928 Section 5 Table 6 (Water engineering with steel) can only be met in some cases, e.g. 3 in 1 as a replacement for red lead. A new coat of Power Coat 3 in 1 is very difficult to mattify or roughen using e.g. sandpaper due to the high flexibility of the paint. Power Coat 3 in 1 has excellent adhesion to previously painted coats, and all topcoats that have been tested have excellent adhesion when painted on top of 3 in 1.

APPROVALS FOR STEEL STRUCTURES AND EQUIPMENT

Power Coat 3 in 1 is approved for use in the construction, renovation, and maintenance of building structures in accordance with the Ü mark shown. The approval covers virtually all corrosion classes in accordance with DIN 55928 T5 Table 4. Power Coat 3 in 1 should not be used if it is exposed to a high degree of chemical influence (such as immersion in chemicals), ref. comment 2. If Power Coat 3 in 1 is used for OEM or workshop application: Please note that 3 in 1 is more elastic and flexible than, for example, two-component paint systems.

COLORS

- Cf. brochure: [Maling for Industri](#).
- Other colors available with orders of at least 25 liters (effect colors from 30 liters).
- Unpigmented is a special production; it has all the functional pigments, but no color pigments. Can be applied as a milk-colored metal protection or can be colored with suitable color paste.
- The colors can be mixed together without restriction.
- Colors that are not originally manufactured at the factory but are later colored with color paste may not necessarily comply with all original specifications.

Effect colors

- E.g. RAL 9006, 9007, DB 601, DB 701, DB 702, DB 703, Shiny Silver 096
- The information in our technical data sheet mainly applies to normal colors. Not all data applies to aluminum and Miox (iron oxide pigmented) coatings. These coatings can be applied in a thicker film (+50%) and therefore dry somewhat more slowly. They offer better protection against corrosion.
- The optical impression depends greatly on the application method used ("soaking wet" = lighter; "drier" = darker) and other factors (dry film thickness, temperature, spray distance, amount of paint on the roller, etc.). These colors appear more "vibrant" if they are not applied under exactly the same conditions. Use a little Power Coat Special Thinner to delay the drying time and prevent skin drying – the effect pigments need time to distribute evenly in the paint film.

Color pigments have extremely high lightfastness and weather resistance and are used in the automotive industry, among other things. However, there are differences in color fastness between color shades:

Exceptionally resistant:	Effect colors (A1), white colors (A2)
High resistance:	Gray colors (also gray-white; A2)
Resistant:	Blue, green colors (A2)
Sufficiently resistant:	Yellow, orange, and red colors (A2)

For colors in the lower part of the spectrum, UV resistance can be improved with a top coat of clear varnish (e.g. 2K-Anti-Graffiti, Kristallglasur, etc.). Colors with a high pigment content can produce an uneven and rough surface when rolled. This is purely aesthetic. Spraying or another color as a top coat is recommended to achieve a nice result.

For best UV protection while maintaining gloss, dry film thicknesses of more than 60 µm should be applied! Higher dry film thickness allows small paint molecules to bond together into large ones, creating gloss. If the film thickness is too low, the surface will become dull over time.

CHEMICAL RESISTANCE

Power Coat 3 in 1 has been tested for its resistance to the following substances:

- Transformer oil
- (Universal) Lubricating grease
- Hydraulic oil (<80°C)
- Sirup
- Saltwater solution
- Gear oil (<80°C)
- Ethyl alcohol (10%)
- Household chemicals
- Pigeon droppings
- Acetic acid (1.5%)
- Seawater
- Diesel/fuel oil
- Chain oil
- Antifreeze (e.g. VW-Audi glycol 100% and 50%, glythermines NF 50%)

GLOSS LEVEL

Semi-gloss (depending on color: 25–55%). By adding Power Coat Gloss Additive for 3 in 1 (3/4 liter to 5 liters), the gloss level will increase by approx. 20%.

Nitrofest	less gloss
Vedheftsgrunner Spesial	less gloss
3 in 1 Gloss Additive	higher gloss (up to +20%)

Gloss grade	RAL colors
20 – 30%	1006, 1007, 2000, 3000, 3002, 7011, 8016, 0610
30 – 40%	1021, 2004, 2011, 3009, 5007, 5010, 5012, 6005, 6011, 6018, 9005
40 – 50%	7001, 7023, 7032, 9001, 9002, 9010, 9011
50 – 60%	7035, 1015

RAL 9007, 9006 and 601 cannot be measured. The majority of colors have a gloss grade between 35 and 40%. Lighter colors have a higher gloss (45 – 55%).

DRY MATTER CONTENT, ETC.

Dry matter content	Approx. 70% based on weight Approx. 53% based on volume
Viscosity	Approx. 150 sec. (DIN 4mm)
Theoretical consumption	8.8m ² /ltr. at 60µm
Density	1.2 – 1.5 depending on color

STORAGE

The ideal storage temperature for Power Coat 3 in 1 is between +10°C and +20°C. Frost does not normally damage the paint. Temperatures above +25°C will reduce its shelf life.

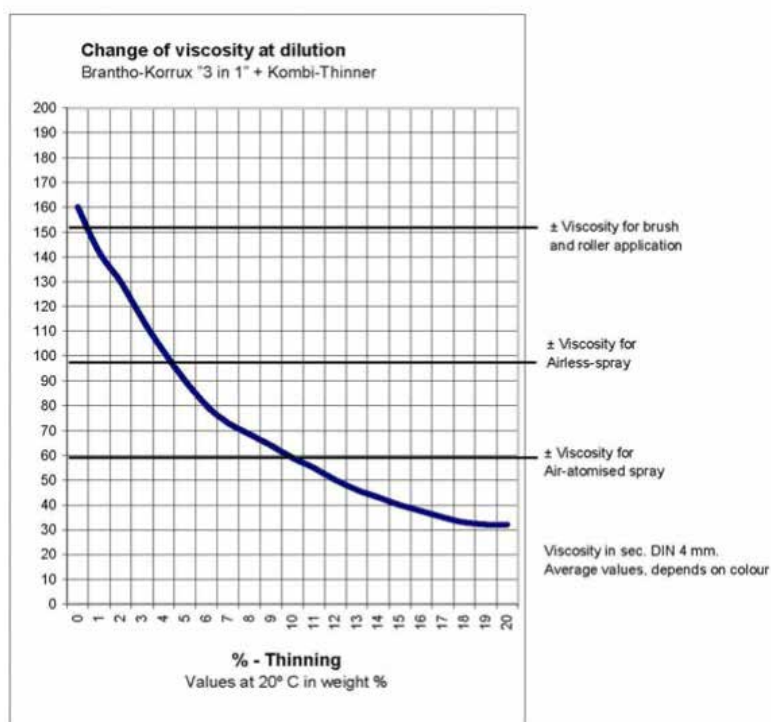
THINNING

Shorter drying time: Power Coat Kombitynner

Longer opening hours: Power Coat Spesialtynner

NOT suitable: Water

The graph below will help you find the correct amount of thinner you should add for your application method. The values are averages; any deviations depend on color and temperature.



VOC

VOC = Volatile Organic Compound

VOC content in Power Coat 3 in 1, ready for application with a brush or roller: 360–410 g/liter

VOC content in a worst-case scenario: maximum 500 g/liter

The most common areas of application for 3 in 1 are not subject to this VOC regulation. Within the regulation, the main areas of application are II1i (resp. IIAi) - *1) and II2e (resp. IIBe) - *2). The EU limits are 600–840 g/liter from 01/01/2007 and 500–840 g/liter from 01/01/2010. Other areas of application are: single-component special coatings, primers for iron, steel, aluminum, single- or multi-layer coatings, corrosion-resistant coatings, chassis and underbody protection, two-component special coatings, adhesion primers, intermediate coatings, protective coatings, primers, top coats, intermediate coats, for both indoor and outdoor use (II1i, II2e, II1j, II2cbb, II1d, II1g, II2d, II2caa). Professional indication: 2004/42/IIA(i) 600 (2007) 500 (2010) 500 and: 2004/42/IIB(e) 840 (2007) 840 (2010) 500

Calculated VOC Content:

- VOC values are based on products ready for use at 20°C, for the specified application methods and additive levels:
- As supplied, for brush or roller application: approx. 390 g/l
- With 5% addition of Curing Accelerator for "3 in 1", ready for brush or roller application: approx. 405 g/l
- With 10% addition of Curing Accelerator for "3 in 1", ready for airless spraying: approx. 415 g/l
- Ready for airless spraying without Curing Accelerator, with 3% Kombi Thinner: approx. 420 g/l
- Ready for conventional spraying without Curing Accelerator, with 7% Kombi Thinner: approx. 440 g/l
- Thinned with 15% Kombi Thinner (e.g., for small nozzle sizes or low ambient temperatures): approx. 490 g/l

Applicable VOC limits (from 2007):

II2(d) / IIB(d): 420 g/l

II1(d) / IIA(d): 400 g/l

II2(d) / IIB(d): 540 g/l

II1(j) / IIA(j): 550 g/l

II1(g) / IIA(g): 450 g/l

Applicable VOC limits (from 2010):

II2(d) / IIB(d): 420 g/l

II1(d) / IIA(d): 300 g/l

II2(c) / IIB(c): 540 g/l

II1(j) / IIA(j): 500 g/l

II1(g) / IIA(g): 350 g/l

VOC <400g/ltr

with 5% 3 in 1 Curing Additive	ready for roller/brush	approx. 405g/ltr.
with 10% 3 in 1 Curing Additive	ready to spray paint	approx. 415g/ltr.
with 3% Kombitynner	ready to spray paint	approx. 420g/ltr.
with 7% Kombitynner	ready to spray paint	approx. 440g/ltr.
with 15% Kombitynner	ready to spray paint (small tips, low temperature)	approx. 490g/ltr.
3 in 1 HD-spray with propellant	spray can	approx. 510g/ltr.