# Sustainable - maximum protection - easy to process

Copper

Iron

Zinc

Steel

Aluminium

Glass

Rust

Stainless steel

Old coatings

Many hard plastics

and much more.

Power Coat 3 in 1



The original since 1987

Primer and top coat in one

High solids (>70%)

Very high elasticity

1 component

High filling power

8.8 m<sup>2</sup>/ltr.

Very high hiding power

Very high adhesive strength

Can be processed at -10°C to + 30°C

Residual material reusable

Very high stability

# Rust protection paint

for painting, rolling, spraying and much more.

silk gloss





















#### Influence of the material properties Stability Hiding Coverage Solid state **Filling Edge cover** 1-component 120µm Hiding tan<sub>dfest</sub>igkeit VOC Coverage High Solid **Industry-standard paintwork** Painting process time frame Priming Intermediate priming Top coat Painting with 3 in 1 Top coat Top coat Top coat 2 **Colour shades Processing options** Container sizes Substrates **Temperature** Available containers Many hard plastics 70 Steel Copper colour shades Stainless stee Glass Flash rust on stock Old coatings Iron Zinc and much more Other non-stock colours 3in1 can be rolled, brushed, 3in1 can be Any type of metal (and are usually available sprayed, flooded, dipped sizes of 0.75 l, 5 l, other substrates) can and painted using thick-film

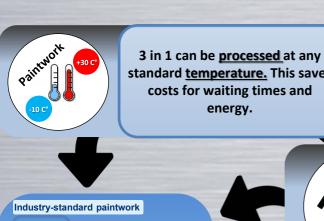
#### Influence of the processing framework

The use of Power Coat 3 in 1 can reduce <u>painting times dramatically</u>

The <u>single-layer coating and 1-component properties</u> enable quick and easy processing.

At the same time, the high <u>flexibility</u> of the other influencing factors prevents delays and further accelerates the painting process. Even if you are painting <u>multiple coats</u>, you <u>avoid</u> the <u>intermediate steps</u> described above.

#### Your cost advantage in the process



Painting with 3 in 1

Material

price /m²

Energy

Additiona

costs

Costs in the painting process -40%

price /m²

Energy

Waste

disposal

Additiona costs

Personnel

standard temperature. This saves costs for waiting times and energy.

-40%



Any processing method is possible: brushing, rolling, spraying, dipping, flooding. This simplifies the painting process and significantly reduces ancillary and labour costs.

High

Solid

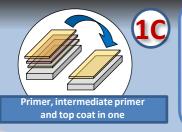


The material properties significantly reduce the painting time and material consumption and have a significant influence on further painting costs. Disposal costs are only incurred for the metal bucket. The paint can be stored again at any time due to its 1-component property.

We deliver in the volume unit "litre". This saves additional material.



The wide range of coating options saves on additional primer materials. Costs for retooling, cleaning, paint preparation and disposal are also saved.



3 in 1 is usually applied in a single coat. Due to its additional 1-component property, energy, ancillary and labour costs are significantly reduced. If required, it can be recoated after just 15 minutes with itself or any other (known to us) topcoat WITHOUT SANDING.

# The time and cost benefits result in your overall advantage in the process

#### The particularly simple processing ensures:

- a significant reduction in painting time
- a significant reduction in paint defects
- a significant reduction in painting costs a guarantee of fulfilment of the protective properties
- a simple repainting

# Guarantee of a long protection period

### **Corrosion protection recommendation**



One colour coat Power Coat "3 in 1" is already thick enough to ensure good corrosion protection.



11/2 colour coats of Power Coat "3 in 1"

are the successful working methods of many of our customers in practice (e.g. preparing corners, edges, weld seams, etc., then completely coating all surfaces).



Two colour coats of Power Coat "3 in 1" protect against heavy corrosion loads for up to 15 years.



Three colour coats of Power Coat "3 in 1"

offer the longest possible protection against the greatest atmospheric corrosion loads.

## Recommendation according to the corrosivity categories of DIN-EN-ISO 12944

Corrosivity	C 1				C 2				C 3				C 4				C 5				сх
category	insignificant				low				moderate				strong				very strong				N/A
Protection period	L	М	н	VH	L	М	н	VH	L	М	н	VH	L	М	н	VH	L	М	н	VH	N/A
(in years)	<5	<15	>15	>25	<5	<15	>15	>25	<5	<15	>15	>25	<5	<15	>15	>25	<5	<15	>15	>25	>25
Dry film thickness (in μm)	>60	>60	>80	>160	>60	>80	>160	>160	>80	80-160	160-240	>240	80-160	>160	>240	>320	160-240	160-240	240-320	>400	>400
Number of paint coats	1	1	1	2	1	1	2	2	1	1-2	2-3	3	1-2	2	3	4	2-3	2-3	3-4	5	5
	Inside			Inside Exterior				Inside Exterior				Inside Exterior			Inside Exterior				Inside Exterior		















Inside:

**Buildings** with

constant, extremely

high condensation

Surroundings

Inside: Heated buildings with a neutral atmosphere: e.g. offices, shops, schools, hotels

Exterior: Not applicable

Exterior:

**Rural areas** 

**Unheated buildings** 

Production rooms with high humidity (e.g. laundries, breweries, dairies)

**Urban and industrial** atmosphere

Inside: Chemical plants, swimming

pools

with moderate salt load

**Buildings with constant** condensation

Exterior: Industrial/coastal atmosphere Industrial/coastal atmosphere with Buildings in the high salt load offshore area

In order to achieve the expected protection durations in the corrosivity categories of DIN-EN-ISO 12944-6, we recommend the specified coating thicknesses on iron and steel. Rough, uneven substrates may require thicker layers.

In order to achieve faster curing at higher layer thicknesses, Power Coat Adhesionprimer Special or Power Coat "2-Kompo" can be used as an alternative to Power Coat "3 in 1" for priming and/or intermediate layers. For galvanised surfaces and high loads, we recommend Power Coat "2-Kompo" as a base coat; due to the galvanisation, a paint layer thickness of 80 µm less is sufficient. Other top coats can be used for certain surface requirements. For permanent exposure under water (fresh water, salt water, brackish water, soil), we recommend Power Coat "2K-Durasolid".

<sup>\*</sup>A saturated colour layer corresponds to approx. 80 µm







**Epoxy replacement** 







**Condensation water** 



Approval for steel structures and steel components (DIN 55928 T5 Tab.4)



Daimler-Chrysler release



Cert. no. Z2100814153003

Test mark. U 98 02 14153 001

**TÜV PG 049** 

**DIN 50021** 

**DIN 53151** 

**DIN 50017** 

DIN 50917 T1 (based on)

**DIN 53210** 

RAL-ZU 18 (based on)





Mining licence Hygiene Institute A 108 395-03-To Substance main group 4, substance subgroup 1, serial no. 42



Heat + 60°C, cold -20°C, salt-Heal + 60 0, 2010 - 20 0, 3211 spray mist test, intermediate adhesion when repainting without sanding, adhesion when repainting







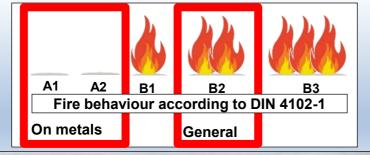
Food safe Art. 3 para. 1c Regulation 1935/2004 EEC



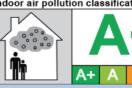
Electrostatic leakage resistance

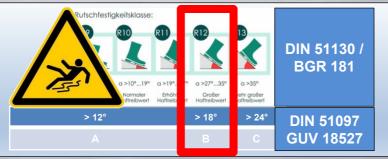
RAL  $7032 = 0.04 \times 10^9 \text{ k-}\Omega$ 

RAL  $9006/9007 = 0.02 \times 10^9 \text{ k} - \Omega$ 







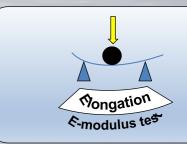




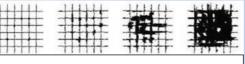
Resistant to saliva and perspiration



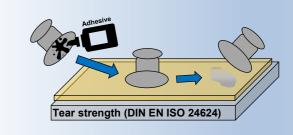






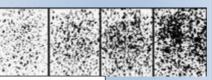


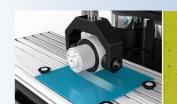
Adhesive strength (DIN EN ISO 2409)





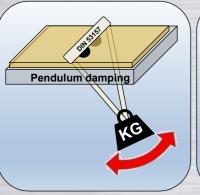


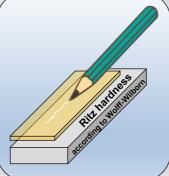




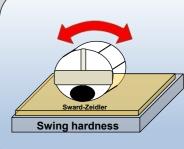


Shot peening test (DIN EN ISO 2409)





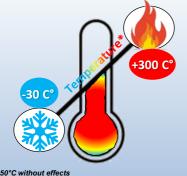






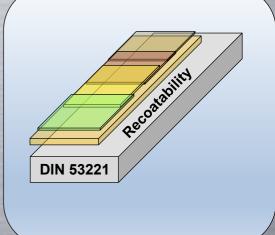






\*Up to 150°C without effects Up to 300°C WITHOUT loss of adhesion, colour change (slight to strong, depending on colour). Softer colour film when warm. Lower temperatures possible, but cannot be imaged by the tester.

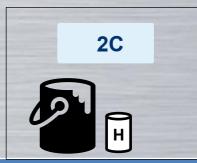




# Comparison of Power Coat 3in1 and 2-Component corrosion paint



VS.



Туре	Power Coat 3 in 1	Industrial standard						
Possible overcoat time	Any time	2 hours to 1 day						
Drying time from 20°C	Standard	Very fast						
Intermediate sanding	Not necessary	Often necessary						
Toxic ingredients	None	<ul><li>Zinc compounds</li><li>Aromatics</li><li>Isocyanate</li></ul>						
Storage stability	3 year (+ 5 years)	1-2 years						
Processing time	Unlimited	2-4 hours						
Application/ Drying temperatures	-10 to +30°C	+10 to +30C°						
Reuse of leftovers	yes	no						
Multi-layer with the same product	yes	no						
Substrates	Nearly every substrate	Limited substrates per product						
Pre-treatment requirements	Low	standard						
Drying requirements	Very low	average						