

Aqua Metallschutz 3 in 1

Aqua Metal Protection 3 in 1

**External and internal
Base and final coat**

General description

Type of material:	Water-based special coating for metal surfaces with or without iron mica.
Applications:	Thick-layer metal protection paint for base, intermediate and final coating on iron and non-ferrous metals, stainless steel, hot-dip galvanized steel parts, powder-coated substrates coil coating and non-anodized aluminium. Suitable for use on steel frames, FH doors, trapezoidal sheet metal claddings, railings, drain pipes, metal constructions, sheet metal roofs with a minimum gradient of 5 %, etc. Metal protection 3 in 1 is hand-weldable therefore also suitable for areas that are touched more frequently.
Product properties:	Excellent adhesion. The use of special adhesion additives and anti-corrosive pigments results in double-acting corrosion protection. No rust protection primer required, quick-drying, very good edge coverage, optimum paint-over ability, no loosening of old coatings, weather-resistant, odourless.
Shades:	Without iron mica:

White and 
MIX

With iron mica:
DB 701, DB 702 (approx. RAL 9007), DB 703, RAL 9006 and



The thixotropy allows a very high dry film thickness on vertical surfaces and edges. This protective property can result in a surface with more or less structure when applied to larger surfaces, depending on the processing method and processing conditions. This can be minimized by using Additive SRS (see technical data sheet).

Packaging sizes: 750 ml, 2.5 l, 5 l*
*5 l only in white, DB 703 and MIX

Technical data

Binder base: acrylate polymer dispersion
Density: 1.100 - 1.380 g/cm³ depending on colour shade
Gloss: Satin gloss
Tinting: With lightfast tinting concentrates up to 3%.
Applications: Exterior and interior
Viscosity: Thixotropic
Thinner:

Aqua Metal Protection 3 in 1 is a water based paint. Jansen has developed special additives for the various processing options. Aqua Metal Protection 3 in 1 should not be diluted with water.

Overview for brush, roller and spray application

	With iron mica	Without iron mica
Airless	Additive SRS	Additive A
HVLP, XVLP	Additive SRS	Additive SRS
Use a brush	Additive SRS	Additive SRS
Rolling	Additive SRS	Additive SRS

Thinner:

Additive A

Adjusts Aqua Metal Protection 3 in 1 without iron mica for airless application.

By adding Additive A, up to 350 ml/m² (350 µ) can be applied without running in a single injection.

The content of a 125 ml container of Additive A is sufficient to make 2.5 litres of Aqua Metal Protection 3 in 1 ready for use.

Additive SRS**Brushing and rolling**

To obtain a longer open time when brushing or rolling, we generally recommend the use of additive SRS at higher temperatures and larger surfaces.

Use max. 2 % SRS Additive.

Litre specification of Aqua Metal Protection 3 in 1	Max. quantity of SRS
750 ml	15 ml
1 l	20 ml
2.5 l	50 ml
5 l	100 ml

Note: Aqua Metal Protection 3 in 1 must not be diluted with water!

Spraying

Additive SRS can be added to Aqua Metal Protection 3 in 1 to adjust the HVLP and XVLP application. Additive SRS is used to adjust the spray viscosity up to

4 % added to Aqua Metal Protection 3 in 1.

Litre specification of Aqua Metal Protection 3 in 1	Max. quantity of SRS
750 ml	30 ml
1 l	40 ml
2.5 l	100 ml
5 l	200 ml
10 l	400 ml

Application temperature:

The ideal application temperature is between 15°C and 25 °C. A minimum temperature of +7 °C at the object must be maintained in any case, as otherwise film faults may occur.

Varying temperatures, coating thicknesses and weather conditions may change drying times considerably.

Do not use above 80 % humidity.

Drying:	(23 °C 60 % rel. air humidity) Dust dry after 30 minutes Dry to the touch after approx. 2 – 3 hours Ready for overcoating after 5 – 6 hours Ultimate hardness: is reached after approx. 7-10 days!
Yield:	6 - 8 m ² /l per coating, depending on type of application

Method of application

Substrate preparation:	All surfaces must be clean, dry, and free of rust, grease and dust. Always wash/grind surfaces with Jansen Metal Cleaner (observe technical data sheet) and abrasive fleece and rinse well with water to neutralise the surface. When cleaning large areas with a high-pressure cleaner, please observe the regulations of the municipality or district for water disposal.
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Iron and steel:

Rust, rolling skin, mill scale, etc. must be removed mechanically (Sa2, St2).

Surface preparation level Sa2: Almost all rolling skin/scale, almost all rust, almost all coatings and almost all foreign impurities must be removed. All remaining residues must adhere firmly.

Surface preparation level St2: Steel surfaces or surfaces of metallic coatings with residues of coating materials including rust and other impurities.

Stainless steel:

Clean thoroughly with Jansen Metal Cleaner and then sand.
Sand polished stainless steel surfaces until they are matt.

Substrate preparation:**Tin roofs:**

Tin roofs should have a minimum runoff tendency of 5 %.

Important! Aqua Metal Protection 3 in 1 may only be used on metal roofs that are coated or untreated on the side to which it is to be applied.

Aqua Metal Protection 3 in 1 should not be used on roofs that have already been renovated.

Sand down and clean firmly seated old coatings of tin roofs. Test old coatings with regard to their adhesive strength by taking a lattice and chip sample

(VOB (German Construction Contract Procedures), Part C, DIN 18363).

Carefully grind and clean old coatings that are intact. Completely remove damaged and peeling old coatings.

Apply a sample coat of $150-225 \text{ ml/m}^2 = 250 \text{ to } 300 \text{ g/m}^2$. After drying for 4 - 5 days, an adhesion test must be carried out. If adhesion has not yet been completely achieved, repeat after another 5 days if necessary. Loose and flaking old coatings must be removed completely.

Zinc substrates:

Carry out the prescribed surfactant washing with our Jansen Metal Cleaner (observe technical data sheet). Completely remove whitish corrosion material.

Blasting (sweeping) may be necessary in special cases.

Aluminium:

Carry out the prescribed surfactant washing with our Jansen Metal Cleaner (observe technical data sheet). Completely remove whitish corrosion material.

Anodised aluminium cannot be coated.

For large-area application on coil coating and powder coatings in outdoor areas:

Because of the large number of different systems used for coil coating and powder coating, substrate testing is mandatory. Different weathering conditions must also be considered for the surfaces.

Contact our Jansen technical advisors in the field.

If you do not have the contact details, our head office will be happy to provide them. You can reach our head office on 02641 38 97 0.

Our Jansen consultant will then discuss the next steps with you.

Steel frames and FH doors

These are usually factory primed with a powder coating. Fill the metal cleaner into a bucket and clean/sand the surface with abrasive fleece/rinsing agent. Leave on for 5 to 15 minutes, depending on the degree of soiling. Any oxidation residues can be easily removed with the abrasive fleece.

Then rinse the surface thoroughly with clear water. Then allow the surface to be coated to dry thoroughly.

Old coatings on acrylate or alkyd resin:

Test old coatings with regard to their adhesive strength by taking a lattice and chip sample

(VOB (German Construction Contract Procedures), Part C, DIN 18363).

Carefully grind and clean old coatings that are intact. Completely remove damaged and peeling old coatings.

Ensure that the preparation of substrates and the application of the paint conform to current standards. For more information in this respect, please see the BFS [German Federal Commission for protection of paint and material assets] data sheets and VOB [German Construction Contract Procedures], Part C, DIN 18363, Painting and Coating.

Special notes:

Old door gaskets in most cases are not compatible with acrylic varnishes (of any kind). In the event of contact, plasticisers move into the paint and make it sticky. In any case, the sealing rubbers should be checked by a specialist and replaced, if necessary.

Paint structure:

Jansen Aqua Metal Protection 3 in 1 is supplied ready for painting and can be adjusted to the spray viscosity with max. 4 % Additive SRS and Additive A depending on the application. Please refer to the technical data sheet. Please see the item Thinner on pages 2 and 3.

Do not use water for dilution.**Iron and steel:**

Apply two to three undiluted coats with a brush or roller, depending on the stress. A wet film of 80 - 150 µm can be applied to vertical surfaces run-free.

Zinc and aluminium:

1 – 2 coats

Coil coating and powder coating:

2 coats

Form of application:

Brushing: Use water-based paint brush for brushing.

Rolling: Use short pile (approx. 5 mm) microfibre mix for rolling.

Spraying:

	With iron mica	Without iron mica
Airless*	Additive SRS	Additive A
HVLP, XVLP	Additive SRS	Additive SRS

***Important!** The Graco EasyMax is not suitable for the application of Aqua Metal Protection 3 in1 with micaceous iron oxide. Paints without micaceous iron oxide can be readily applied by spraying.

Spray adjustment with additive A



Type	Additive addition	Material pressure (qty)	Pneumatic pressure (qty)	Nozzle	Spray gun ID
Airless	5 %	200 bar	///	412	///
Airless	5 %	140 bar	///	412	///

Spray adjustment with additive A



Type	Additive addition	Material pressure (qty)	Pneumatic pressure (qty)	Nozzle
Airless	5%	180 bar	///	410

Important! The Graco EasyMax is not suitable for the application of Aqua Metal Protection 3 in1 with micaceous iron oxide. Paints without micaceous iron oxide can be readily applied by spraying.

Spraying adjustment with additive SRS


Temp spray: 50°C

Temp spray: 60°C

Type	Additive addition	Material pressure (qty)	Air pressure (volume)	Nozzle	Spray gun ID
XVLP	2%	8 - 12	100%	S.4.1	yellow
XVLP	0%	8 - 9	100%	S.4.1	red
Aircoat	4%	200 bar	2 bar	411	///
Airless	4%	230 bar	///	410	///
Airless	0%	230 bar	///	410	///

Spray gun filter: White (50 mesh)

Spraying adjustment with additive SRS


Type	Additive addition	Material pressure (qty)	Air pressure (volume)	Nozzle
Easymax WP II	0 %	10	///	411
Easymax WP II*	2 %	6	///	411
Aircoat	0 %	120 bar	1 bar	312
Aircoat*	2 %	120 bar	1 bar	310
Airless	0 %	220 bar	///	312
Airless*	2 %	150 bar	///	310

***For larger areas**

Important! The Graco EasyMax is not suitable for the application of Aqua Metal Protection 3 in 1 with micaceous iron oxide. Paints without micaceous iron oxide can be readily applied by spraying.

Spray gun filter: 100 mesh

Check filter every 2 hours

Aqua metal protection 3 in 1 undiluted stable up to: 1000 µ
 With 2 % additive SRS stable up to: 300 µ

Type	Additive addition	Material pressure (qty)	Pneumatic pressure (qty)	Nozzle
High pressure	4 %	///	4-5 bar	1.5 – 1.8 mm
Fine coating	4 %	///	0.48 bar	1.8 mm

The above tables were compiled under controlled conditions. Larger areas may require nozzles with bigger bores and/or wider spraying angles. This must be tested on the object itself.

If several containers are used to apply the final coat, ensure batch uniformity.

Cleaning your tools:

Brush and Roll: If possible, clean water immediately. If used for a prolonged period with additional breaks, clean in between. Do not let the paint dry.

Spraying equipment: For removing water-soluble paints and spraying materials from the paint spraying equipment, we recommend using Jansen Cleaner for spraying devices.

Storage: Keep in a cool, dry place protected from frost. Seal opened containers well and briefly turn upside down.

VOC value: EU limit for this product (Cat. A/i):
140 g/l VOC (2010).
This product contains a maximum of 140 g/l VOC.

Marking Please take note of our updated Safety Data Sheet available online at www.jansen.de

This technical information has been compiled based on current technological standards. However, we can provide no guarantee for the general validity of individual recommendations since actual application and processing are not under our control and the variable nature of substrates mean that specific technical and practical factors will determine appropriate methods of application in each case. These recommendations do not absolve the customer from his responsibility to test the supplier's products for suitability for the intended use. The "General Delivery and Payment Conditions of the Paint Industry" as per recommendation approved by the Federal Cartel Office on 1 January 2018 apply. The release of this datasheet invalidates all previous datasheets for this product.

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