

## Technical Data Sheet

### Description:

Two-component fast-drying acrylic primer and high-build filler (2 in 1)

### Usage:

AF 49 is a two-component acrylic primer and sandable filler (2-in-1) with high dry matter content, developed for professional and hobby painting of agricultural, transport, and construction machinery. It is also suitable for the perfect surface treatment of other industrial products, such as production and transport lines, machining, cutting and handling machines, technological cabinets, switchboards, residential containers, exposed steel structures, etc. Its main advantages are high filling capacity, fast drying to a sandable state, and excellent adhesion to steel, zinc, aluminum, and putties. It is most often used to level surfaces, fill small irregularities and pores, and unify the color of the substrate before applying the final acrylic paint from the ACE or PE series.

AF 49 can be used as a classic sandable filler to achieve a maximally smooth surface, or in a thinner layer as a "wet-on-wet" base, which allows for quick single-coat processes without the need for sanding. It is easy to apply with airless or airmix spraying, a brush, or a roller. It does not run, dries quickly, and sands very well without clogging the abrasive. Sandable after 1 hour at 60°C or 4 hours at 23°C, dry with 400–800 grit sandpaper, wet with 600–1200 grit sandpaper.

### Substrate:

Steel, zinc, aluminium

### Colours:

RAL 1015 (highly anti-corrosive), RAL 7035 (anti-corrosive)

### Mixing ratio:

	by weight	by volume
hardener PH 92	8 : 1	7 : 1

### Specific gravity: (ČSN EN ISO 2811-1)

undiluted paint

hardener PH 92	1,31 ± 0,2 g/cm <sup>3</sup>
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### Solids: (ČSN EN ISO 3251 a 23811)

	by weight	by volume
hardener PH 92	68,5 ± 4%	55 ± 4%

### Theoretical spreading rate: (ČSN EN ISO 23811)

	undiluted paint		
40 µm DFT	10,9 m <sup>2</sup> /kg	13,8 m <sup>2</sup> /liter	92 g/m <sup>2</sup>
80 µm DFT	5,4 m <sup>2</sup> /kg	6,9 m <sup>2</sup> /liter	184 g/m <sup>2</sup>

To reach 40 µm DFT apply 73 µm undiluted paint. Practical spreading rate depends on application method and conditions, shape and roughness of the surface.

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### Drying: (ČSN EN ISO 9117)

120 µm WFT, temperature 23±2°C, relative humidity 50%	surface dry grade 1	to touch grade 3	to manipulation grade 4
hardener PH 92	15 minutes	1 hour	3 hours

Drying and recoatability time strongly depend on wet film thickness, temperature, humidity, ventilation and paint colour. Fully load and measure the coated film after 7 days, laboratory testing after 3 weeks of drying under the above conditions.

### Gloss: (ČSN ISO 2813)

Semi-matt, 20 GU, angle-wise 60°, outflow time 23s, ISO outflow cup 4mm

### Supply viscosity:

outflow time 45s, ISO outflow cup 6mm

### Recommended dilution: (ČSN 673032)

	airless/airmix	pneumatic spraying	brush/roller
thinner	PT 03	PT 03	PT 03
by weight	0 - 10 %	10 - 17%	0 - 17%
by volume	0 - 15 %	15 - 25%	0 - 25%

The specific thinning ratio depends on the selected application method, spray tip size, application pressure and application regime. More detailed recommendations are given in the Application Methods section.

### Sagging: (ČSN EN ISO 16862)

temperature 23 ± 2°C, relative humidity 50 ± 5%

outflow time 23s, ISO outflow cup 4 mm	no sagging 350 µm WFT
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### Pot life: (ČSN EN ISO 9514)

temperature 23±2°C, outflow time 23s, ISO outflow cup 4 mm

hardener PH 92	3,5 hours
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Pot life strongly depends on the paint temperature. At temperatures of 30-40°C it can be half, at temperatures of 5-10°C it can be several times longer.

### Application conditions:

The surface must be dry. The air, surface and paint temperature cannot decrease below +5°C during application and drying. Relative humidity cannot exceed 80%. The surface temperature must be at least 3°C above the dew point.

### Surface preparation:

Remove oil, grease, salt and other contamination from the surface with a suitable detergent according to EN ISO 12944-4.

Steel surfaces: Abrasive blast-cleaning to Sa 2½, alternatively manual or mechanical cleaning to min. St 3 corresponding to EN ISO 8501-1.

Galvanized surfaces: To ensure maximum adhesion of AF 49, it is recommended to first apply 10-20 microns DFT of WP 10 reactive primer to problematic freshly hot-dip galvanized surfaces.

For electrolytic galvanized, older, or high-quality freshly hot-dip galvanized surfaces, the required adhesion of AF 49 is ensured by manual roughening, washing with the environmentally friendly cleaning agent CL 07, and subsequent rinsing with clean water!

Aluminium surfaces: To achieve the required surface roughness, use the sweeping method with a non-metallic abrasive. If this method cannot be applied, roughen the surface mechanically and clean thoroughly with CL 07, followed by rinsing. The use of WP 10 reactive primer in a layer of 10-20 microns of dry film significantly increases the adhesion and durability of the entire coating system.

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**Previously painted surfaces:** If the type of old coating is unknown, first check for compatibility with a test. Remove oil and grease with thinner (do not use CL 07) and lightly roughen the surface by sanding. Apply thickened and diluted AF 49 coating to a small area. If the surface does not crack within 30 minutes, AF 49 can be used for renovation. Ensure compatibility between old and new coatings if you do not perform a compatibility test.

### Application methods:

High-pressure spraying (airless), air (pneumatic) spraying, or brush/roller.

When applying with airless spraying using 0.009"–0.011" nozzles, the material can be diluted by up to 10%. The recommended working pressure is approximately 220 bar. Smaller nozzle diameters allow for better film thickness control and lower individual coats.

For nozzles 0.013"–0.015", dilution up to a maximum of 5% is recommended, mainly due to the risk of running. Larger nozzle diameters are suitable for achieving the required dry film thickness (DFT).

These recommendations are based on internal application tests carried out with two cross coats applied without a time interval. When applying individual cross coats with a time interval of several minutes, higher dilution is possible with larger nozzles, but always taking into account climatic conditions and the verticality of the substrate.

For air spray application, use 1–1.8 mm nozzles and a pressure of 3–4 bar.

When applying with a brush/roller, use a suitable type according to the composition of the coating material.

Climatic conditions for application: the substrate temperature must be at least 5°C, maximum 40°C and at least 3°C above the dew point. The coating material should have a minimum temperature of 10°C. Relative air humidity should not exceed 85%, there must be no condensation of water vapor on the surface of the steel structure, but at least 30%.

### Storage:

In the original unopened packaging at temperatures between +5°C and +25°C.

### Packaging:

0,8 kg	4 kg	12 kg	24 kg
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### Notes:

DFT - dry film thickness

MS - medium dry matter

GU - Gloss unit

WFT - wet film thickness

HS - high dry matter

KU - Krebs unit of viscosity

All information given in this technical data sheet are based on our best knowledge, laboratory test results and practical experience to the date specified below. According to the fact that the conditions of the product's use are out of our control, we can only guarantee the product quality itself. As a producer we cannot be responsible for damage arising from the use of the products without following above recommended instructions or for improper purposes. We reserve the right to change above specified information without prior notice. Always request the actual version of the product data sheet. This technical data sheet replaces all previously released. The validity of the data provided here will be terminated automatically after five years.