

Agropox SW

Epoxy resin coating for hydraulic steel structures



Product description

Description/Material	Abrasion-resistant, solvent-free, economical 2-component coating material.
Binding material / active substances	Based on epoxy resin.
Purpose	As a versatile solvent-free thick-film coat for all kinds of steel construction, especially for hydraulic steel structures cause of its good abrasion resistance.
Properties	The coating is tough-hard, but not brittle. Largely impact and strike resistant, with special abrasion resistance. High film thickness per working step possible.
Colors	RAL 7032, white.
Test certificates / Approvals	External tested and listed by the Bundesanstalt für Wasserbau (BAW) (Federal Waterways Engineering and Research Institute).
Packaging / container sizes	<ul style="list-style-type: none"> ■ 5 kg (incl. component B). ■ 25 kg (incl. component B).
Storage	Storable in perfectly sealed original containers, dry and cool, for 2 years.
Quality assurance	High quality products require strict control of raw materials and their processing. In-house chemists ensure this quality from receipt to exit of the goods. AvenariusAgro produces according to the TÜV-approved and certified quality management system ISO 9001-2015 and was awarded with the Responsible Care certificate.

Technical data

Consumption	<ul style="list-style-type: none"> ■ Theoretical: 0,75 kg/m² for 500 µm DFT. ■ Practical: ca. 0,90 kg/m² for 500 µm DFT. Can be significant higher, depending on the working conditions (pipe dimensions, hose length, hose cleaning, etc.)
Mixing ratio	82 parts by weight comp. A 18 parts by weight comp. B
Density	Mixed material: 1,5 kg/l.
Pot life	<ul style="list-style-type: none"> ■ At 20°C: 45 minutes. ■ At 30°C: 25 minutes.
Solids content	<ul style="list-style-type: none"> ■ By volume: 100 % (DIN 53219).

Drying

Object-temperature	Degree of dryness 4 (DIN 53150)	Degree of dryness 6 (DIN 53150)	exposure to standing water after:	exposure to flowing water after:	pore test after: (0,4 kV/100 µm NDFT)
5°C	35 h	36 h	45 h	6 d	72 h
8°C	33 h	34 h	40 h	6 d	64 h
10°C	31 h	32 h	35 h	5 d	56 h
12°C	27 h	28 h	30 h	5 d	52 h
15°C	22 h	24 h	25 h	4 d	48 h
20°C	16 h	18 h	20 h	3 d	36 h
23°C	9 h	9 h	10 h	3 d	24 h

VOC	See safety data sheets.
Thinner	<ul style="list-style-type: none"> ■ If exposed to underwater: do not add thinner! ■ No exposure to underwater, film thicknesses > 500 µm: do not add thinner! ■ No exposure to underwater, film thicknesses < 500 µm: max. 2 % Verdünnung 215 (Thinner 215).

Resistance

Chemical	Water, wastewater, condensation water, diluted inorganic acids, diluted caustic solutions, fats and oils, occasionally exposure to solvents and fuels.
Mechanical	Very robust and highly resilient.
Weather	Industrial atmosphere; at UV load chalking of the surface is possible.
Temperature	<ul style="list-style-type: none"> ■ Dry: up to +80°C. ■ Wet: up to +40°C.

Processing

Surface preparation	<ul style="list-style-type: none"> ■ Steel: The surface has to be dry and free of fat, oil, dirt and dust. Sandblasting at least Sa 2½ (EN ISO 8501-1). If exposed to water: roughness (G) medium, Rz 60 – 100 µm according to ÖNORM EN ISO 8503-1. <p>Water-soluble impurities: Maximum salt pollution acc. standards of DIN SPEC 55684. Higher concentration in individual cases only after agreement with the material supplier and the client.</p>
Coating proposal	<ul style="list-style-type: none"> ■ Steel: 1 x 60 µm Agrozinc SW, 2 x 300 µm Agropox SW. <p>Surfaces in contact with water, where an active anticorrosive primer (as Agrozinc SW) cannot be used, for example due to zinc aggressive water: Without or with low risk of mechanical damage, Agropox 10 EG can be used as a primer.</p>
Material preparation	Mix component A and B thoroughly at specified mixing ratio. Mix only the quantity, which can be applicated within the pot life. After mixing, the material temperature must be between +20°C and +30°C.
Processing temperature	<p>Air- and object temperature: at least +8°C. To reach a good consistence for the application, it is necessary to warm up the material to at least +20°C. Depending on the conditions, there is the opportunity to combine thermal insulation of the hose, warming up the material or using a material-flow heater.</p>
Application	<p>If exposed to underwater: do not add thinner! At film thicknesses > 500 µm: do not add thinner!</p> <p>Consistent film thickness and optic are dependent on the application method. In general airless spray application leads to the best result. The specified layer thicknesses will be reached by airless spray application. To reach the specified layer thicknesses at brush or roller application (use Agropox SW ST), further coating layers can be necessary, depending on the construction, the local conditions and the color of the coating material.</p> <p>Before coating work, it is advisable to coat a test area on site, to proof if the chosen application method for the product fulfils the requirements.</p> <ul style="list-style-type: none"> ■ Airless spray application: Efficient airless equipment, pressure in the pistol at least 220 bar, hose diameter at least 3/8 inch (8 mm), nozzle size 0,38 – 0,58 mm (max. 0,66 mm), spray angle 40 – 80°. (under good conditions pumpable up to 100 m) <p>With Agropox SW, brushing or rolling is possible for small areas. For bigger areas, we suggest to use Agropox SW ST (special quality for brush and roller application). Please also consider the information in the processing guideline. If not available, please request.</p>

Waiting periods

- After priming coats with Agrozinc SW: at least 6 hours.
- Between top coats with Agropox SW: at least 12 hours, max. 3 months (the surfaces have to get cleaned).

Final drying period

Object-temperature	Degree of dryness 4 (DIN 53150)	Degree of dryness 6 (DIN 53150)	exposure to standing water after:	exposure to flowing water after:	final hardness reached after:
5°C	35 h	36 h	45 h	6 d	14 d
8°C	33 h	34 h	40 h	6 d	12 d
10°C	31 h	32 h	35 h	5 d	10 d
12°C	27 h	28 h	30 h	5 d	9 d
15°C	22 h	24 h	25 h	4 d	8 d
20°C	16 h	18 h	20 h	3 d	7 d
23°C	9 h	9 h	10 h	3 d	6 d

Hardening also occurs under water.

Cleaning tools

Verdünnung 215 (Thinner 215). If not in continuous use, clean tools within the pot life.

Regulation governing chemicals

Disposal

Special waste incineration or problematic waste collection points. Do not dispose of together with household waste. Do not allow to enter drainage systems, the soil or water courses. Dispose soiled packaging in the same way as the product itself.

Safety Data Sheet

The safety Data Sheet may be accessed at <http://www.avenariusagro.at>

Technical Information: Agropox SW, status: 04 / 2022

These technical data were compiled based on state of the art technology and our experience. Due to the many different substrates and conditions of the coated objects, we accept no liability for the technical information provided. The information therefore does not release the buyer / user from his responsibility to professionally test our materials for suitability for his envisaged application, under his pertinent conditions. The validity of this data sheet shall expire following the release of a revised / new PDF version.

Technical advice

Addressing all substrates found in practice and the treatment required when applying this product is beyond the scope of this data sheet. Our technical advisers will gladly assist you with additional detailed information relevant to your specific project.

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