# **Amphibolin / Amphibolin-W**

The universal paints based on pure acrylate for a wide range of uses around the house



## **Product Description**

Field of Application

Versatile, emission-minimized and solvent-free facade and interior\* paint with exceptionally good adhesion to almost any surface. The special composition reduces the writing effect / stress whitening in colored coatings.

Universal paint for outside, on mineral plasters from class CS II, concrete, exposed brickwork, fiber cement panels, stable old paintwork, galvanized surfaces, hard PVC, wood (not true to size). Not suitable for ETICS.

For outdoor use for weather-resistant coatings on smooth and finely structured surfaces with a high level of protection against aggressive air pollutants.

In the interior\* for highly durable, abrasion-resistant, structure-retaining coatings, especially also for coatings with a high degree of loading on Capaver glass fabric wall coverings as well as due to the high light reflection in weakly lit corridors, stairwells, storage rooms, factory halls and underground garages.

\*Amphibolin-W is equipped with a preservation of the coating against infestation and damage by fungi and algae. Therefore it cannot be used indoors.

**Material Properties** 

- Strong adhesion on many surfaces
- High light index
- Resistant to disinfectants
- Emission-minimized and solvent-free
- Driving rain-proof, water-repellent

Material Base / Vehicle

100% pure acrylate synthetic dispersion according to DIN 55945 with wet adhesion promoter to achieve optimal adhesive strength.

Packaging/Package Size

Amphibolin: 2.5 I, 5 I, 12.5 I. Airfix: 25 I Hobbock

**ColorExpress:** 1.25 I, 2.5 I, 5 I, 7.5 I, 12.5 I

Amphibolin-W: 12.5 |

Colours

White.

Amphibolin/ Amphibolin-W can be tinted with CaparolColor or AmphiColor tinting colors yourself.











- When using on non-absorbent substrates such as hard PVC or galvanized surfaces, add a maximum of 10% AmphiColor or CaparolColor.
- In the case of self-tinting, mix the required total amount with one another in order to avoid color differences.
- Other colors can be tinted via ColorExpress.
- For purchases of >100 liters in one color and order, tinting is available from the factory.
- In order to identify possible tinting errors, please check the color shade accuracy before processing. In the event of abnormalities or deviations from the delivery target (e.g. color deviations) or the customary nature of the condition, please also observe the guidelines for inspection obligations for the delivery of tinted goods from the German association "Verband für Dämmsysteme, Putz und Mörtel e.V.": brochures and leaflets - VDPM.
- Brilliant, intense color tones may have a lower hiding power. It is therefore advisable to apply a comparable, opaque, white-based, pastel color tone in advance for these colors. A second finishing coat may be necessary.

#### Color resistance according to German BFS\*-Merkblatt (Data Sheet) No. 26:

Class: A

Group: 1-3, depending on the color

\*Bundesausschuss Farbe und Sachwertschutz (German committee dealing with paint and protection of properties)

Gloss Level

Amphibolin/ Amphibolin-W: silk matt, class: G2 according to EN 1062

Storage

Store in a cool place and keep the container tightly closed.

Technical Data

Characteristic data according to EN 13 300:

Due to tinting, deviations in the technical characteristics are possible.

- Wet scrub resistance: Class 1, corresponds to scrubbing-resistant according to DIN 53778
- Contrast (hiding power): class 2, with a coverage of 8 m<sup>2</sup>/ l

Characteristic data according to EN 1062:

Maximum particle (grit) size: fine (<100 µm)

Density: Approx. 1.4 g/cm<sup>3</sup> Dry film thickness: 50 - 100 μm, class: E<sub>2</sub> ■ Diffusion-equivalent air layer > 50 m, class: C<sub>1</sub>

thickness sdCO2:

■ Water permeability (w-value):  $\leq 0.1 \text{ [kg/(m}^2 \cdot h^{0.5})], \text{ class: W}_3 \text{ (low)}$ 

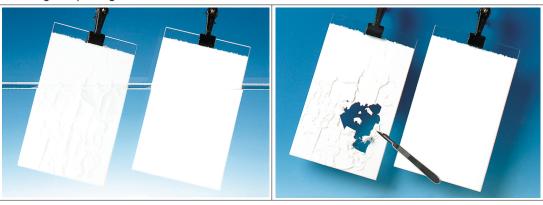
value):

■ Water vapour permeability (sd-  $0.14m \le s_d \le 1.4m$ , class:  $V_2$  (medium)

Due to tinting, deviations in the technical characteristics are possible.

Note

As shown in our laboratory test on glass plates, the embedded "wet adhesion promoter" prevents the binder from swelling even under extreme wet conditions and thus permanently protects the paint from blistering and peeling.



Left glass plate: Conventional emulsion facade paint, right glass plate: Amphibolin.

Suitability according to Technical Information No. 606 Definition of Application Areas

#### Amphibolin:

Interior 1	Interior 2	Interior 3	Exterior 1	Exterior 2			
+	+	+	+	+			
(-) not suitable / (0) conditionally suitable / (+) suitable							

## Amphibolin-W:

	Interior 1	Interior 2	Interior 3	Exterior 1	Exterior 2	
	_	_	_	+	+	
(-) not suitable / (0) conditionally suitable / (+) suitable						

## **Application**

Suitable Substrates

The substrates must be free of dirt, separating substances and dry. Please note our Technical Information No. 650 "Substrates and their pretreatment" with regard to their suitability for different substrates and their necessary pre-treatment.

Substrate Preparation

#### \*\*\*EXTERIOR\*\*\*

#### Finishing plasters/ renders according to DIN EN 998-1 class CS II from 2.5 N/ mm<sup>2</sup>:

New plasters/ renders can be coated after a sufficient waiting period, usually after 2 weeks at approx. 20°C and 65% rel. humidity. In less favorable weather conditions, e.g. influenced by wind or rain, significantly longer waiting times must be observed. An additional key coat of CapaGrund Universal reduces the risk of lime efflorescence with alkaline finishing plasters, so that the paint can be applied after just 7 days.

#### Old mineral plasters/ renders:

Renewed plaster/ render areas must be well set and dried out. Apply a key coat of OptiSilan TiefGrund or CapaSol RapidGrund on coarsely porous, absorbent, slightly sanding plasters. Apply a key coat of Dupa-Putzfestiger on heavily sanding, powdery plasters.

Coat mineral light plasters/ renders with a compressive strength of up to 2.5 N/ mm² with Sylitol® or silicone resin products.

#### Concrete:

Clean concrete surfaces with dirt deposits or a flour grain layer mechanically or with high pressure water jets in compliance with the legal regulations. On slightly absorbent or smooth surfaces, apply a key coat of Amphibolin, diluted max. 5% with water. Prime highly absorbent surfaces with OptiSilan TiefGrund or CapaSol RapidGrund. Prime with Dupa-Putzfestiger on flourishing surfaces.

#### Fiber cement panels with and without asbestos fibers:

Observe the German BFS-Merkblatt (Data Sheet) No. 14. Observe the German TRGS 519 for panels containing asbestos fibers. The key coat is applied in accordance with our Technical Information No. 650 "Substrates and their pretreatment". Coat exposed panels including the back side and edges. In the case of new, strongly alkaline fiber cement boards, first apply a key coat of Disbon 481 EP-Uniprimer to avoid lime efflorescence.

#### Cement-bonded chipboards:

Due to the high alkalinity of cement-bonded chipboards, a key coat of Disbon 481 EP-Uniprimer must be applied to avoid lime efflorescence.

## Load-bearing dispersion, dispersion silicate or silicone resin paint coatings:

Clean old coatings with high pressure water jets in compliance with the legal regulations. Observe the substrate test in accordance with German BFS-Merkblatt (Data Sheet) No. 20.

#### Old coatings with the following properties:

Slightly absorbent, firm, dry, stable: see point "Surface Coating System"

Moderately absorbent: CapaGrund Universal diluted up to 3% with water

Strongly absorbent: OptiSilan TiefGrund undiluted

Chalking or powdering (also under the action of water based on BFS-Merkblatt (Data Sheet) No. 20, B.13"Oberflächenfestigkeit, Kreidung"): First prime with Dupa-Putzfestiger

#### Shiny and water-repellent (hydrophobic) surfaces:

Roughen mechanically. First prime with CapaGrund Universal.

If there is still a water repellent effect after the mechanical roughening, we recommend a key coat of Dupa-HaftGrund.

#### Load-bearing, old plasto-elastic emulsion paint coatings, e.g. old Cap-elast surfaces:

Clean soiled, chalking old coatings with high pressure water jets, manual washing or other suitable methods in compliance with the legal regulations. Let the surface dry well. When coating such substrates, Amphibolin/ Amphibolin-W should only be used in white or light to medium shades with light reflectance values > 60.

#### Load-bearing dispersion plaster coatings:

Clean old plasters/ renders with a suitable method. In the case of wet cleaning in compliance with the legal regulations, allow the surfaces to dry thoroughly before further treatment. Apply a key coat of Amphibolin/ Amphibolin-W, diluted up to max. 5% with water.

## Non-load-bearing paints, emulsion paints or emulsion plaster coatings:

Remove completely using a suitable method, e.g. mechanically or by stripping and then cleaning with high-pressure hot water jets in compliance with the legal regulations. Prime with Amphibolin/ Amphibolin-W, diluted with max. 5% water. Prime highly absorbent, sandy surfaces with Dupa-Putzfestiger first.

#### Non-stable, mineral coatings:

Remove completely by grinding, brushing off, scraping, pressurized water jets in compliance with legal regulations or other suitable measures. In the case of wet cleaning, allow the surfaces to dry thoroughly before further treatment. Prime with Dupa-Putzfestiger.

#### Wood, not true to size, unpainted:

Remove resin leaks and pockets from new wood. Wash off greasy tropical woods with nitro thinner. In the case of old wood, weathered layers must be removed down to the healthy wood. The wood moisture may be max. 12% for hardwoods and max. 15% for softwoods. Prime with Capalac Holz-Imprägniergrund. For woods that tend to discolour, an intermediate coat of Capacryl Holz-IsoGrund is required.

#### Galvanized surfaces:

Clean the zinc surface in accordance with BFS-Merkblatt No. 5. Prime with Amphibolin/ Amphibolin-W, diluted with max. 5% water. In the case of colored coatings on galvanized surfaces, white efflorescence can occur when exposed to high levels of moisture. These must be wiped dry and coated additionally with Amphibolin/ Amphibolin-W.

## **Rigid PVC:**

Clean and sand. Prime with Amphibolin/ Amphibolin-W diluted with max. 5% water. Observe BFS-Merkblatt (Data Sheet) No. 22.

#### Coil coatings:

Clean with ammoniacal wetting agent. Prime with Amphibolin/ Amphibolin-W.

Note: Silicone-containing coil coatings cannot be painted over. Since these cannot be determined on the construction site, a test coat with a subsequent adhesion test must always be carried out.

#### Brick exposed masonry:

Only frost-resistant, absorbent facing bricks or clinker bricks without foreign inclusions are suitable for painting. The masonry must be dry, free of salt and the joints free of cracks.

First prime with Amphibolin/ Amphibolin-W, diluted up to 5% with water. If brown discoloration is visible, continue working with the water-free facade paint Duparol (solvent-based).

## Surfaces contaminated by industrial fumes or soot:

Coat with the water-free facade paint Duparol.

#### Fungal or algae-infested areas:

Remove mold or algae deposits by wet blasting, observing the legal regulations. Wash surfaces with Capatox. Use FungiGrund on absorbent substrates. After drying well, apply Amphibolin-W.

#### **Cracked plaster or concrete surfaces:**

Coat with FibroSil, PermaSilan or the Cap-elast system depending on the crack class.

#### Areas with salt efflorescence:

Brush off salt efflorescence dry and remove. Prime with Dupa-Putzfestiger first. When coating surfaces with salt efflorescence, no guarantee can be given for the permanent adhesion of the coating or the prevention of salt efflorescence.

#### **Defects**

Repair small defects with fine filler Caparol Fassaden-Feinspachtel. Repair big defects up to 20 mm preferably with Histolith-Renovierspachtel. Prime the repaired areas subsequently.

## \*\*\*INTERIOR (Amphibolin-W cannot be used indoors)\*\*\*

Plasters with a minimum compressive strength of 1.5 N/ mm² according to DIN EN 998-1: Coat solid, normally absorbent plasters without pretreatment. Prime coarse, porous, sandy, absorbent plasters with OptiSilan TiefGrund or CapaSol RapidGrund first.

## Gypsum- and ready-to-use-plasters with a minimum compressive strength of 2 N/ mm<sup>2</sup> according to DIN EN 13279:

Sand gypsum plasters with sintered skin, remove dust, prime with Dupa-Putzfestiger.

#### Gypsum boards:

Prime absorbent panels with OptiSilan TiefGrund or Dupa-Putzfestiger.

#### Plasterboards:

Sand off the burrs. Strengthen soft gypsum fillings with Dupa-Putzfestiger. For panels with water-soluble, discolouring ingredients, prime with AquaSperrgrund. Note BFS-Merkblatt No. 12.

#### Concrete:

Remove any formwork oil residues and powdery, sanding substances. See point "Surface Coating System".

#### Aerated concrete:

Prime with Capaplex diluted 1: 3 with water.

#### Sand-lime brick and exposed brickwork:

Coat without pretreatment.

#### Load-bearing coatings:

Matt, slightly absorbent coatings can be painted directly. Roughen shiny surfaces and enamel coatings.

#### Non-load bearing coatings:

Remove unstable lacquer and emulsion paints or synthetic resin plaster coatings. Paint directly on slightly absorbent, smooth surfaces. On coarsely porous, sanding or absorbent surfaces prime with OptiSilan TiefGrund or CapaSol RapidGrund. Mechanically remove non-stable mineral paint coatings and clean the surfaces from dust. Apply a key coat of Dupa-Putzfestiger.

## Distemper and glue-color coatings:

Wash off thoroughly. Prime with Dupa-Putzfestiger.

#### Uncoated woodchip, relief or embossed wallpapers made of paper:

Paint without pretreatment.

#### Non-stick wallpaper:

Remove completely. Wash off paste and waste residues. Prime with Dupa-Putzfestiger.

#### Mold-infested surfaces:

Remove mold deposits by wet cleaning. Wash surfaces with Capatox. Prime with FungiGrund on absorbent substrates. Apply a finishing coat with Indeko-W, Malerit-W or Fungitex-W on heavily infested areas. The statutory and official regulations (e.g. the Biological and Hazardous Substances Ordinance) must be observed.

#### Surfaces with nicotine, water, soot or grease stains:

Wash off nicotine soiling as well as soot or grease stains with water with the addition of greasedissolving household cleaning agents and allow to dry well. Clean dried water stains with a dry brush. Apply a sealing key coat with AquaSperrgrund.

Apply the finishing coat IsoDeck on heavily soiled surfaces.

## Wood and wood materials:

Apply a key coat with Amphibolin, undiluted. In the case of wood or wood-based materials that tend to discolour, an insulating key coat of Capacryl Holz-IsoGrund is required.

#### Small imperfections:

After appropriate preparatory work, fix small imperfections with Akkordspachtel according to the processing instructions and, if necessary, re-prime.

Method of Application

Amphibolin can be applied with a brush, roller and suitable spray equipment.

Airless application: Spray angle: 50° Nozzle: 0.017-0.021"

Injection pressure: 150-180 bar

Apply Amphibolin-W only with a brush or roller.

Surface Coating System

#### First key coat or intermediate coat:

Amphibolin/ Amphibolin-W undiluted or diluted with max. 5% water.

#### Finishing coat:

Amphibolin/ Amphibolin-W undiluted or diluted with max. 5% water. On rough surfaces, the first or intermediate and finishing coat is diluted 5% with water and spread well.

Consumption

Approx. 120 ml/ m<sup>2</sup> per application on a smooth surface. The exact consumption on rough surfaces must be determined by applying a test coat.

In order to achieve the best possible protection against algae and fungal attack with Amphibolin-W, it is necessary to apply two coats of at least 240 ml/ m² in total in order to achieve an average layer thickness of at least 150  $\mu$ m. Each additional coat increases the layer thickness by approx. 75  $\mu$ m with a consumption of at least 120 ml/ m² per coat. The consumption is correspondingly higher on rough surfaces.

**Application Conditions** 

#### Temperature limits during processing and drying:

Material, air and substrate temperature: min. +5°C to max. +30°C

Drying/Drying Time

At +20°C and 65 % relative humidity surface-dry after 4-6 hours and recoatable after 24 hours. Completely cured and ready for stress after approx. 3 days. Lower temperatures and higher humidity extend the drying time.

**Tool Cleaning** 

Clean tools with water after use. Observe waste water regulations.

Note

To avoid paint deposits, coat wet-on-wet in one go. Do not use on horizontal surfaces exposed to water.

For optical reasons, it is advisable to use the facade paints AmphiSilan, Muresko, AmphiSil or Sylitol NQG on rough, structured surfaces outdoors.

With airless spray application, stir the paint well and sieve.

When using TiefGrund TB indoors, a typical solvent odor can occur. Therefore ensure good ventilation. Use the low-aromatic Dupa-Putzfestiger in sensitive areas.

There is an increased risk of fungus and algae formation on areas that are exposed to more moisture than usual under special building conditions or due to natural weather influences. We therefore recommend using our special products e.g. ThermoSan NQG, Amphibolin-W or Duparol-W for endangered surfaces. These products contain active ingredients that delay the growth of fungi and algae.

Amphibolin-W is a product that is equipped with special active ingredients to prevent the formation of fungi and algae on the coating. This depot of active ingredients offers long-lasting, time-limited protection, the duration of which depends on building conditions, such as the strength of the infestation and moisture exposure. It is therefore not possible to permanently prevent the growth of fungi and algae. FungiGrund can be used to adjust the absorption after cleaning, to prepare the surface infested with algae and fungi.

In the case of dense, cool substrates or if the drying time is delayed due to the weather, auxiliary substances can become visible on the surface of the coating as yellowish/ transparent, slightly shiny and sticky paint tears due to exposure to moisture (rain, dew, fog). These auxiliary substances are water-soluble and are removed automatically with sufficient water, e.g. after repeated heavy rainfall. This does not adversely affect the quality of the dried coating. Should a direct rework still take place, the paint tears/ auxiliary substances must be pre-moistened and washed off completely after a short exposure time. An additional key coat of CapaGrund Universal must be carried out. If the coating is applied under suitable climatic conditions, these paint tears do not occur. Markings of repairs in the surface depend on many factors and are therefore unavoidable (BFS-Merkblatt (Data-Sheet) No. 25). The use of phenol-based surface disinfectants can lead to yellowing of the surface.

## **Advice**

German Certificates

- Amphibolin Kohlendioxiddurchlässigkeit (carbon dioxide permeability)
- Amphibolin Helligkeit (brightness)
- Amphibolin Desinfektionsmittelbeständigkeit (disinfectant resistance)

## **Technical Information No. 100**

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)

#### Amphibolin:

May cause allergic skin reactions. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Do not get in eyes, on skin or on clothing. Wear protective gloves/ eye protection. IF ON SKIN: Wash with plenty of soap and water. Warning! Hazardous respirable droplets may be formed when sprayed. Do not inhale spray or mist. Hotline for allergy inquiries: 0800/1895000 (free of charge from the German landline network).

Amphibolin: Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).

Amphibolin-W: Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) < 15 ppm Contains:1,2-benzisothiazol-3(2H)-one, 2-octyl-2H-isothiazol-3-one, 2-methyl-2H-isothiazol-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). This product is a "treated product" according to EU Regulation 528/2012 (not a biocidal product) and contains the following biocidal active ingredients: 2-octyl-2H-isothiazol-3-one (CAS No. 26530-20-1), pyrithione zinc (CAS No. 13463-41-7), terbutryn (CAS No. 886-50-0).

Disposal

Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local authorities. Observe the relevant national regulations.

In Germany: Dispose of liquid material residues at the collection point for old paints/ varnishes, dispose of dried material residues as construction and demolition waste or as municipal waste or household waste.

EU limit value for the VOC content

Amphibolin: (Cat. A/a): 30 g/ I (2010). This product contains max. < 10 g/ I VOC. Amphibolin-W: (Cat. A/c): 40 g/ I (2010). This product contains max. < 10 g/ I VOC.

Product Code Paints and Enamels

Amphibolin: BSW20 Amphibolin-W: BSW50

Technical Assistance

All substrates that occur in practice and their technical processing cannot be dealt within this publication. If substrates are to be processed that are not listed in this technical information, it is necessary to consult with us or our sales representatives. We are happy to advise you in detail and on a building-related basis.

**Customer Service Centre** 

Tel.: +49 6154 71-71710 Fax: +49 6154 71-71711

e-mail: kundenservicecenter@caparol.de

International Distribution: Please see www.caparol.com