Amphibolin

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.

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 l, 2.5 l, 5 l, 7.5 l, 12.5 l

Colours

Amphibolin can be tinted with "CaparolColor" or "AmphiColor tinting colors" yourself.





TECHNICAL INFORMATION NO. 100

- 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 (binder)

Group: 1-3, depending on the color (pigmentation)

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

Gloss Level

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 m²/ I

Characteristic data according to EN 1062:

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

■ Density: Approx. 1.4 g/cm³
 ■ Dry film thickness: 50 - 100 μm, class: E₂
 ■ Diffusion-equivalent air layer > 50 m, class: C₁

thickness s_dCO₂:

■ Water permeability (w-value): ≤ 0.1 [kg/(m² · h^{0.5})], class: W₃ (low) ■ Water vapour permeability (sd- $0.14m \leq s_d \leq 1.4m$, class: V₂ (medium)

value):

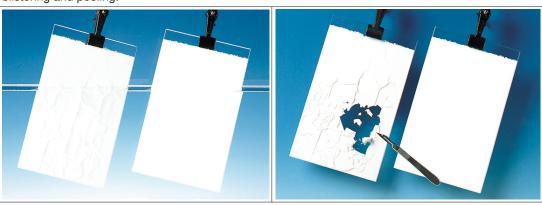
Due to tinting, deviations in the technical characteristics are possible.

Supplementary Product

"CapaSol RapidGrund", "OptiSilan TiefGrund", "CapaGrund Universal", "HaftGrund EG"

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

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. Observe VOB, Part C, DIN 18363, Para. 3.

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 surfaces:

Finishing renders according to DIN EN 998-1 class CS II min. 2.5 N/ mm²:

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 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 with requirements according to EN 1504-2:

For tenders according to EN 1504-2 "Surface protection systems for concrete", we recommend our products from the Disbon range "Surface protection coatings".

Concrete without requirements according to EN 1504-2:

Clean concrete surfaces with dirt deposits or powdery grain layer mechanically or by pressure water jetting in compliance with the legal regulations.

On slightly absorbent or smooth surfaces: one priming coat of "Amphibolin", max. 5 % diluted with water.

On highly absorbent surfaces: Apply one priming coat of "OptiSilan TiefGrund" or "CapaSol RapidGrund".

On chalky surfaces: one priming coat with "Dupa-Putzfestiger".

Fibre-cement boards without asbestos fibres:

Prime coat according to our Technical Information No. 650 "Substrates and their Pretreatment". Treat exposed boards including the back and edges. For new, highly alkaline fibre cement boards, apply a priming coat of "Disbon 481 EP-Uniprimer" to prevent lime efflorescence.

Fibre-cement boards with asbestos fibres:

Observe the German BFS* Leaflet No. 14. Observe the German TRGS 519 for panels containing asbestos fibers.

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 (leaflet) 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 consideration of water load based on BFS*-Merkblatt (leaflet) No. 20, B.13"Oberflächenfestigkeit, Kreidung" (Surface strength, chalking)):

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 (LRV) > 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", 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", 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 "Capacryl Holz SchutzGrund". 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", 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".

Rigid PVC:

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

Coil coatings:

Clean with ammoniacal wetting agent. Prime with "Amphibolin".

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. Observe BFS*-Merkblatt (leaflet) No. 20.

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 surfaces:

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/ mm² according to DIN EN 13279:

Sand gypsum plasters with sintered skin, remove dust, prime with "OptiSilan TiefGrund".

Gypsum boards:

Prime absorbent panels with "OptiSilan TiefGrund".

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 (leaflet) No. 12.

Note Q2/Q3 Filling / thin gypsum layers < 0.5mm: When using gypsum-containing, hydraulically setting levelling compounds in quality level Q2/Q3, a transparent, water-based primer is recommended. For this, we refer to the Maler&Lackierer leaflet No. 2 -9/2020 "Haftfestigkeitsstörungen von Beschichtungen auf verspachtelten Gips(karton)platten" (Adhesion problems of coatings on filled gypsum (cardboard) boards) of the "Bundesverband Farbe, Gestaltung, Bautenschutz and the Bundesausschuss Farbe und Sachwertschutz". As an alternative to gypsum-based Q3 filling, filling with pasty filling compounds has proven successful.

Concrete:

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

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 grease-dissolving 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 "Aqua-inn No 1"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 defects:

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

*Bundesausschuss Farbe und Sachwertschutz

(German committee dealing with paint and protection of properties)

Method of Application

Amphibolin with brush, roller and suitable spraying equipment.

Airless application:

Airless membrane, piston				
spray pressure	150 - 180 bar			
Nozzle size in inches	0,017" - 0,021"			
Spray angle	50°			
Gun filter in MW	0,031mm			
Dilution	5% Wasser			
Nespri unit*				
Nozzle size in inches	0,016" - 0,019" Double nozzle			
spray pressure	preset			

^{*} The use of Amphibolin in Nespri equipment is possible, but not fog-free!

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

Surface Coating System

First key coat or intermediate coat:

"Amphibolin" undiluted or diluted with max. 5% water.

Finishing coat:

"Amphibolin" 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.

TECHNICAL INFORMATION NO. 100

Consumption

Approx. 120 ml/ m² per application on a smooth surface. The exact consumption on rough surfaces must be determined by applying a test coat.

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 laps, 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.

In certain areas of application, the use of solvent-based deep primer is technically necessary. In this case, only the aromatic-free "Dupa-Putzfestiger" is suitable for interior use.

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. "Amphibolin-W", "ThermoSan NQG", or "Duparol-W" for endangered surfaces. These products contain active ingredients that delay the growth of fungi and algae.

With dark shades, mechanical stress can lead to light streaks (writing effect). This is a product-specific property of all matt to silk matt facade paints.

In the case of dense, cool substrates or in the case of drying delays due to weather conditions, auxiliary substances may form yellowish/transparent, slightly glossy and sticky run-off marks on the surface of the coating due to exposure to moisture (rain, dew, fog). These auxiliary substances are water-soluble and are removed independently with sufficient water, e.g. after several heavy rainfalls. The quality of the dried coating is not adversely affected by this. If, nevertheless, a direct recoating should be carried out, the runners/auxiliary materials must be pre-wetted and washed off completely after a short exposure time. Apply an additional priming coat of "CapaGrund Universal". If the coating is applied under suitable climatic conditions, these run-off marks will not occur. Markings of touch-ups in the surface depend on many factors and are therefore unavoidable (BFS Leaflet 25). Use of phenol-based surface disinfectants may lead to yellowing of the surface.

Advice

German Certificates

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

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

White/base 1:

If medical advice is needed, have packaging or label at hand. Keep out of the reach of children. Caution. Spraying may produce hazardous respirable droplets. Do not inhale aerosol or mist. **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). May produce an allergic reaction.

Base 2

If medical advice is needed, have product container or label at hand. Keep out of reach of children. Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. 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). May produce an allergic reaction.

Basis 3:

If medical advice is needed, have packaging or label ready. Keep out of the reach of children. Contains: 1,2-benzisothiazol-3(2H)-one, reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Hotline for allergy enquiries: 0800/1895000 (free of charge from the German fixed network).

Disposal

Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local, regional, national and international authorities.

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

White+Base 1: (Cat. A/a): 30 g/l (2010). This product contains max. 2 g/l VOC. **Base 2:** (Cat. A/c): 40 g/l (2010). This product contains max. 1 g/l VOC. **Base 3:** (Cat. A/a): 30 g/l (2010). This product contains max. 1 g/l VOC.

Product Code Paints and Enamels

BSW20

TECHNICAL INFORMATION NO. 100

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



All suggestions and application instructions herein are based on our latest technical experience. Due to the wide variety of individual project conditions, we cannot be held responsible for their content. These instructions do not release the purchaser/ applicator from his responsibility to determine the suitability of the product in consideration of the project characteristics. These instructions are to be considered void when a new edition is released. Our general conditions of sale and delivery in their latest edition apply. This document is a translation of our German Technical Information No.100 · Amphibolin · Issued: April 2022