

Orbit-Hybrid

Universally applicable acryl-hybride façade paint featuring an extremely high adhesive capacity on nearly all types of substrates. Due to the approved Guard technology the coating is protected against early algae and fungal attack.



Product characteristics

Properties	<ul style="list-style-type: none"> • Resistant to early exposure to rain • Preventive concrete protection (impermeable to CO₂), confirmed by test certificate • Classification OS 2 (OS B) according to DIN EN 1504-2 / DIN V 18026 • Colour shade stability according to BFS Fact Sheet No. 26: class A • Applicable also on aged, elastic systems • Guard protection against algae and fungal infestation of the coating
Areas of application	Exterior only
Suitable substrates in detail	<ul style="list-style-type: none"> • For nearly all types of substrate • Particularly suitable for intensive pigmentation • Applicable in system with Multi-Grund 3 in 1 on dry, not entirely cured mineral renders and concrete

Material description

Binder	Acrylate-hybrid-dispersion
Ingredients	<p>Titanium dioxide</p> <p>Fillers</p> <p>Additives</p>
Density	1.4 kg/l
Water vapour permeability	V 2 (approx. 0.4 m)
Preventive concrete protection (sd-CO₂-value)	80 m according to test certificate.
Water absorption coefficient (w-value)	W 3 (approx. 0.04 kg/m ² h ^{0.5})
Maximum particle size	Fine
Average consumption (short text)	approx. 120 - 180 ml/m ²
Average consumption	<p>Note: In order to obtain the assured product qualities two coats are necessary in exterior areas. It is advisable to determine the exact consumption figure by producing a sample area.</p> <p>The consumption varies depending on the application technique and the substrate. It is therefore advisable to determine the exact consumption figure by producing a sample area.</p>
Colour shade	<p>White</p> <p>Base 1</p> <p>Base 2</p> <p>Base 3</p>

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Suitable tinting paints	Tinting with system-matching tinting pastes via the ALLFAcolor tinting machine, ready-mixed at the factory or with commercially available tinting and full colour paints or tinting concentrates. Please note that with tinted products the specified properties may change.
Gloss level	Matt
Class accord. to BFS fact sheet no. 26	A
Group accord. to BFS fact sheet no. 26	Groups 1 to 3 depending on colour shade
Storage	Cool, but protected from frost
Thinning	Water Intermediate coat: 3%. Finishing coat preferably unthinned.

Substrates

Suitable substrates	All usual mineral substrates (plasters/renders, concrete, masonry) Adherent existing paint layers Plastics and non-ferrous metals All kinds of wood and timber derived products
Substrate conditions	The substrate must be clean, dry, frost-free, firm and sound as well as free from efflorescences, algae, moss, fungal attack, sinter layers and release agents. Follow the building regulations (in Germany VOB, Part C, DIN 18363, Section 3).
Substrate conditions	Base renders (exterior): Mineral base renders must be thoroughly cured and dry, because otherwise discolouration, in particular with tinted following coats, may occur. As a rule of thumb assume 1 day drying time per mm of layer thickness, but correspondingly longer at low temperatures and high humidity. Excessive temperatures and low humidity also lengthen the setting process. Treat replastered locations with fluosilicate. In addition, the guidelines according to BFS Fact Sheet No. 9 apply. Concrete Remove forming oil, grease and wax by washing with surfactant. Remove any sintered layers mechanically. Check the absorbency of the concrete by wetting tests. In addition, the guidelines according to BFS Fact Sheet No.1 apply for exterior coatings and the guidelines according to BFS Fact Sheet No. 8 for interior coatings. Fibre-cement: Products of fibre-cement have to be primed water based. On exterior surfaces solvent-based primers may be used as well. For constructions showing inaccessible and uncoated rear sides and edges do only use water vapour permeable coatings. Since 01.12.2012 uncoated fibre-cement panels containing asbestos must no longer be coated according to the Ordinance on Hazardous Substances (GefStoffV). For asbestos containing fibre-cement the corresponding directives (in Germany TRGS 519) referring to the handling with asbestos have to be observed. Metal and synthetic substrates This product can be applied on e.g. zinc, non-ferrous metals etc. With coatings on these substrates, corresponding substrate preparations have to be considered, such as degrease by washing with wetting agent. Corroding substrates must be isolated beforehand by means of appropriate priming coats. Orbit Grund can be used as bonding agent. In addition, the guidelines according to BFS Fact Sheet Nos. 5 + 6 apply. With coatings on synthetic substrates, preliminary works have to be taken into consideration, such as degrease and sanding. Orbit Grund can be used as bonding agent. Due to the large variety of synthetics, a test area on the concerning substrate is strongly recommended. In addition, the guidelines according to BFS Fact Sheet No. 22 apply.

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Application

Application method	Application by brush, roller or spraying
Spraying data	<p>Spray pressure in bar: 200 (160) / spraying angle: 50° / nozzle size in inch: 0,021- 0,023 / sieve size in mesh: 60 / approx. thinning: 5%</p> <p>Low-mist: suitable airless systems with an output of at least 4 L / min. Working pressure in bar: 70 - 90 / spraying angle: 20° - 50° / nozzle size in inch: 0,021 - 0,023 / sieve size in mesh: 60 / approx. thinning: 5%.</p>
Coating system	<p>First coating in compliance with class OS 2(OS B) according to DIN EN 1504-2 / DIN V 18026 Priming coat with Disboxan 450 Fassadenschutz. Intermediate coat diluted to max. 3% Finishing coat preferably undiluted.</p> <p>Initial coating Priming coat with L-66 Tiefengrund, L-66 Tiefengrund mixed with Grundierfarbe P 1:1, with Tiefgrund LKF or with Tiefgrund W. Intermediate coating thinned to max. 3%. Finishing coating: preferably unthinned.</p> <p>Initial coating on concrete (exterior) Priming coat with L-66 Tiefengrund, L-66 Tiefengrund mixed with Grundierfarbe P 1:1. Alternatively with MultiGrund 3 in 1LEF. Intermediate coating thinned to max. 3%. Finishing coating preferably unthinned.</p> <p>Recoatings Priming coat with L-66 Tiefengrund mixed with Grundierfarbe P 1:1, or with Grundierfarbe WP (in case of highly absorbent old coatings also Tiefgrund LKF or Tiefgrund W). Intermediate coating: thinned to max. 3%. Finishing coating: preferably unthinned.</p> <p>Due to the great variety of our production range and individual applications, other primers and coating systems are possible. Please refer to our technical service for support.</p>
Application	The material can be applied by brush, roller or "low-mist" airless system. When painting, pay attention to spread the material liberally and homogeneously, in order to achieve a coat thickness which is necessary for the durability.
Application hints	Do not apply under a glaring sun, during strong wind or on warm substrates.
Note	<p>Check tinted paint for colour accuracy prior to the application. Objections regarding the colour shade cannot be accepted after the application.</p> <p>The figures given for parameters are average values. Due to the use of natural raw materials in our products, the actual value determined on the individual supplied product may differ slightly without affecting its suitability. These data refer to the white respectively standard product. Tinting may cause deviations.</p> <p>The protection against algae and fungal infestation of the coating is limited in time and inter alia depending on building construction and environmental conditions. A permanent absence of algae or fungi cannot be ensured. High alkaline influences may reduce the effect of the film preservation. A sufficient layer thickness (two coating layers) is necessary.</p> <p>Among other things colour stability depends on the pigment. Organic (true colors) pigments are less colour stable than inorganic (earth colours) pigments. With alkaline substrates and silicate based products only use inorganic colours and pigments. Basically, materials with lower binder capacity should only be tinted in pastel shades. With matt, intensely tinted materials mechanical stress (scratching) may result in bright stripes. In Germany the BFS Fact-Sheet No. 26 applies.</p>
Compatibility	Do not mix with other products.
Practical hints	<p>Repairs Touching up surfaces may be more or less visible, even with using the original coating material. Traces are unavoidable according to BFS Fact Sheet No. 25. Whether a repair is considered as optically disturbing is depending on many parameters, like colour shade, gloss level, layer thickness, substrate, illumination etc. It is advisable to apply a test coating on inconspicuous places.</p>

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Washing out with early Moisture Load

After the application, an early exposure to moisture (dew, fog, rain) may result in a washing out of additives or emulsifiers off the still not dry coating. This will be visible on the surface as transparent traces with a slightly glossy shine. These additives are water-soluble and disappear under the influence of rain, once the coating is dry. If such surfaces must be directly coated, the traces should be washed off thoroughly.

Dark Colour Shades on ETICS

Colour shades with a light reflectance value ≥ 20 are possible on ETICS without limitations. On request, darker shades are possible based on a specific TSR-formulation. Please observe the information regarding colour stability with brilliant and intensive hues.

Colour Accuracy / Metamerism

The perception of colour shades is influenced by various parameters, such as light, gloss, angle, structure. Substrates of different degrees of irregularities may have different effects despite having been coated with the same material. Coating materials of the same hue but of different gloss levels also appear to be different. Various materials of the same colour shade that appear to be matching by daylight may show strong deviations in artificial light (metamerism effect). In case of increased requirements on matching colours of different building parts, materials and / or surfaces, the BFS Fact Sheet No. 25, section 4.2.2. can be taken into consideration.

Protection against Algae and Funghi

For a prolonged protection we recommend to apply two coats. According to the state of technology, a durable protection against algae and fungal attack cannot be ensured.

Sidelight

Unfavourable lighting conditions (sidelight) may occur for instance after the subsequent installation of lights. This fact must be known before works. Specific requirements on evenness and uniformity of the coating have to be previously agreed upon.

Continuous Surfaces

Before processing on continuous surfaces, especially with tinted material, check for colour consistency or mix the required quantity in advance. In order to avoid laps, apply wet-on-wet.

Brilliant and intensive ColourShades

Brilliant and intensive colour shades normally have a lower opacity due to the pigments used. The application of a first coat in a similar defined pastel tint (shown in online price recommendations, ALLFAcolor tinting machine) normally avoids having to apply a layer on top of the standard rule of coating. The stability of brilliant and intensive colour shades is influenced by various parameters such like type of binder, pigment, substrate, shading. A prognosis can only be issued approximately based on BFS Fact Sheet No. 26. On darker shades in combination with matt / silk matt interior paints mechanical stress (scratching, rubbing) may result in bright stripes (writing effect). To avoid this effect in exposed areas, always use specifically designed interior paints.

Recoating of Joint Sealing Compounds

Basically and if possible do not coat elastic joint sealing compounds. If however required, the coating is only possible provided that the sealing compound and coating material are suitable and compatible according to DIN 52452-4 (in Germany). The higher elasticity of the sealing compound may produce hairline cracks in the coating as well as discolouration of the paint. Due to the large variety of products available on the market, we recommend to produce test areas.

Masking Works

Always use UV-resistant adhesive tapes for exterior works. On completion of the coating, particularly with dispersion paints and / or higher layer thicknesses, immediately remove adhesive tapes, in order to avoid untidy contours.

Lime Efflorescence on Concrete

Cavities, large pores and gravel pockets on concrete surfaces must be filled with an appropriate filling compound, e.g. Fassaden-Leichtspachtel, prior to the coating, as otherwise water might penetrate from the outside and cause lime efflorescence on the surface.

New mineral Substrates

New mineral substrates may only be coated after setting and drying, not earlier than after 14 days, better after 4 weeks. In unfavourable drying conditions, the waiting period can be prolonged.

Shrinkage Cracking

With very rough substrates, the formation of higher layer thicknesses in cavities cannot be avoided. Depending on the product, fine hairline cracks may occur on the surface of the coating. These shrinkage crackings are product specific properties and state of the art and do not affect the quality of the coating.

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Horizontal surfaces

Exterior horizontal surfaces such as mural crowns, cornices, windowsills etc. must be professionally protected with appropriate covering material, e.g. from metal or stone, in order to prevent dirt stains and moisture damage of the coating.

Temperature limit	Between + 5° C and + 30° C for substrate and ambient air during processing and drying.
Drying time	At + 20° C for substrate and ambient air and 65% relative humidity (RH), recoatable after approx. 4 - 5 hours. Lower temperature or a higher humidity extend the drying time.
Tool cleaning	Immediately after use with water and soap

Information

Hazard statements and safety advice	May cause an allergic skin reaction. 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. Contains: 1,2-benzisothiazol-3(2H)-one, 2-methyl-2H-isothiazol-3-one, mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1).
	According to European Regulations 528/2012 this product is defined as a "treated article" (not a biocidal product) and contains the following biocidal substance: Terbutryn (CAS-No. 886-50-0), zinc pyrithione (CAS-Nr. 13463-41-7), 2-Octyl-2H-isothiazol-3-one (CAS-Nr. 26530-20-1)
Declaration of ingredients	Poly acrylate dispersion, hybrid binder, polysiloxane, titanium dioxide, siliceous fillers, calcium carbonate, water, additives, preservatives (benisothiazolinone, methyisothiazolinone)
Observe safety data sheets	Further details: See Safety Material Data Sheet (MSDS)
Category VOC	EU limit value for the VOC contents of this product: (Category A/c) 40g/l (2010). This product contains max.
VOC content (in gram per litre)	< 10 g/l
Waste disposal	Only completely emptied containers should be given for recycling. Dispose containers with residues of liquid product via waste collection point accepting old paints and enamels. Dispose dried hardened product residues as construction site/demolition/ municipal or domestic waste.

Container size

Content		EAN code	Article no.
1,25 L	Basis 2	4002822712822	559857
12,5 L	Basis 2	4002822712808	559855
5 L	Basis 2	4002822712815	559856
5 L	Basis 1	4002822712785	559853
1,25 L	Basis 1	4002822712792	559854
4,7 L	Basis 3	4002822712846	559859
1,175 L	Basis 3	4002822712853	559860
11,75 L	Basis 3	4002822712839	559858
12,5 L	Basis 1	4002822712778	559852
12,5 L	Weiß	4002822712747	559849

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System specific and system completing products

Grundierfarbe WP

Acryl-Streichvlies

Hydro-Grund OS

Multi-Grund 3 in 1

Tiefgrund LKF

This data sheet cannot deal with all types of application arising in practice. Therefore, we cannot be held responsible for their content. These instructions do not release the purchaser / applicator from his responsibility of professionally examining the substrate and determining the suitability of the product in consideration of the project characteristics. In case of queries please request the technical assistance of ALLIGATOR FARBERWERKE.