



Purelight Interior Technical Sheet

Reduces up to 88.8% of the pollutants in the air

Eliminates 99.9% of moulds and bacteria even without light, permanently preventing their growth

Prevents dirt depositing on the surfaces

Eliminates bad odours from the surrounding environment

Ensures an excellent aesthetic performance with the application of a single coat



Use in 3 hours



Dilution with water 75%



10-12 m²/ kg



Clean with water

recommended by



BREEAM[®]



Airlite Purelight Interior is a mineral, inorganic interior paint with high breathability. It is available in white and numerous colours. Provided in a powder form, it has to be mixed with water before application guaranteeing perfect coverage and a long-lasting effect. The technology of Airlite is recommended by the Italian Ministry of Environment via Article (G.U. n. 84 - 9 April 2004) – Innovative Systems and Technologies for the mitigation and removal of environmental pollution.

Airlite Purelight Interior is Cradle to Cradle Certified™ at the silver level.

Cradle to Cradle Certified™ products are evaluated for material health, material reutilization, renewable energy use and carbon management, water stewardship, and social fairness.

Benefits

Airlite Purelight Interior uses a set of patented technologies in order to reduce air pollution, to eliminate moulds and bacteria from the surfaces of the walls and to eliminate bad odours. Furthermore, it prevents deposit of dirt particles from the air on the walls, keeping them clean for a long period. Activated in the presence of light, the effectiveness is preserved with limited to no reduction of performance due to the catalytic nature of the technology. With the application of a coat of tinted Airlite Primer and a single coat of Airlite Purelight Interior, an excellent aesthetic performance and a finely velvety natural finish is guaranteed, reducing the time of the application. The special inorganic composition of the paint is in class A2-s1, d0 regarding fire classification (UNI EN 13501-1:2009). The VOC content is less than 0.1 g/l in the white coloured product when being applied (European Directive 2004/42/CE), more than 300 times less than the limit defined in the European Regulations. Airlite is LEED, WELL and BREEAM compliant: Airlite products can help you get points for LEED, WELL and BREEAM certification of buildings.

Field of application

Airlite Purelight Interior has high coverage and can be applied on all the internal surfaces (new, already built or already painted) where a nice smooth matt finish is desired. Particularly:

- painting of masonry, plaster, concrete, lime or plaster whether they are seasoned or old, as long as they are cohesive, adherent and not powdery
- re-painting on previously applied paint in indoors, as long as they are adherent to the surface
- painting of plasterboard

The product is recommended especially in environments where we want to guarantee the maximum level of hygiene, such as in schools, public offices, hospitals, surgeries or in private residencies where a high living comfort is desired, improving the quality of the air, especially in presence of children, elderly and people with respiratory problems, in so far as it continuously improves the quality of the treated environment.

Preparation of the base

The base must be intact, solid, dry, clean, free of dust, oil, efflorescence, incoherent particles, substances or salts that might prevent the adhesion of the paint. The substrate must be treated with tinted Airlite Primer (white or coloured).

Particular cases

Old Substrates: the surfaces must be treated carefully. Moulds must be removed prior to application of Airlite Anti-Mould. Any remaining paint, old overcoats and overlays must be removed so the surface must be cleaned again.

Concrete: the surfaces must be treated carefully. Any remains must be removed and surface flaws repaired before the application of the product. Any remaining oil, grease and wax must be removed with sandblasting machine.

Application Cycle

The complete application cycle includes the preparation of the substrate with a single coat of tinted Airlite Primer, and a single coat of Airlite Purelight Interior.

Tools

- Short-haired roller
- Brush
- Roller grid
- Empty can
- Water
- Scale
- Measuring cup
- Drill mixer

Application Instructions

The following instructions have been compiled to ensure the correct application of Airlite. Please follow them closely. It is essential that the correct ratio/combination of Airlite Powder and water is respected (see below). Airlite is 100% natural and in order to get the best results possible, it is recommended to complete the painting of the surface without interruption in order to have an even finish. The application of a single coat of tinted Airlite Primer is essential before the application of Airlite Purelight Interior. For any enquiry, please contact our customer service department by writing to: info@airlite.com

Instructions for the preparation of 5 kg of Airlite powder. For different quantity, the same proportions and procedures must be applied (eg.: each 1 kg of Airlite powder has to be mixed with 0,75 litres of water).

White Paint*

1. Take 3.75 litres of clean water.
2. Pour 2 litres of the prepared water into 5 kg of Airlite Purelight Interior powder.
3. Mix it with a mixer until the powder is completely dissolved. It is recommended to start with a lower speed and increase it gradually to a higher speed.
4. Add the remaining 1.75 litres of water to the mix.
5. Continue mixing it alternating the speed of the mixer, until you have the optimal consistency.

Coloured paint*

1. Fill up a container with 3.75 litres of clean water.
2. Take the container of the pigment.
3. Pour all the coloured pigment into the 3.75 litres of water, mix it at least for 20 seconds, until it is completely dissolved.
4. Pour 2 litres of the coloured water into the 5 kg of Airlite Purelight Interior powder.
5. Mix it with a mixer until the powder is completely dissolved. It is recommended to start with a lower speed and increase it gradually to a higher speed.
6. Add the remaining 1.75 litres of water to the mix.
7. Continue mixing it alternating the speed of the mixer, until you have the optimal consistency.

Attention:

once the paint is ready, it has to be applied in 3 hours (this is an indicative value, it depends on the environmental conditions).

For airless spray gun application, use a nozzle type 427-429 and a pressure of approx. 100/140 bar.

The tools used must be rinsed thoroughly with water immediately after use.

Analysis of heavy metals and Volatile Organic Compounds (VOC) of Airlite Purelight Interior

Comparison of the emission of Airlite Purelight Interior and the defined limits of the A+ VOC category

VOC EMISSION $\mu\text{g}/\text{m}^3$ – EN ISO 16000-6:2011



Substance	airlite	Limit (A+)
TVOC	<2	<1000
Formaldehyde	<3	<10
Acetaldehyde	<3	<200
Toluene	<2	<300
Trichloroethylene	<2	<250
Ethylbenzene	<2	<750
Xylene	<2	<200
Styrene	<2	<250
2-Butoxyethanol	<2	<1000
1, 2, 4- Trimethylbenzene	<2	<1000
1, 4- Dichlorobenzene	<2	<60

Heavy metal and VOC content of Airlite Purelight Interior

VOC CONTENT - EN ISO 11890/2

VOC < 0,1 g/l

HEAVY METAL CONTENT – ICP - MS

Cadmium	0,000023%
Lead	0,00056%
Chromium	0,00082%
Mercury	< 0,00002%
Arsenic	0,00022%

Airlite has 5 to 500 times better performance in comparison to other paints that have A+ certification.

The indicated values are results of the laboratory tests following the official standard and can be different from the results of the individual cases. Airlite uses a set of patented technologies of which some activates in the presence of sunlight or lamps that have the same frequency; in case of lacking any of them, some of the characteristics cannot be activated (partially or completely).

Technical Characteristics

Water in the end product	75% of the total weight
Time of application	in 3 hours from mixing the powder with water
Apparent density of the product (powder)	0,8 kg/l
Apparent density of the product (liquid)	1,4 kg/l
Vapour permeability	V1 - high - NF EN ISO 7783 447,4 g/m ² / 24h
Fire resistance	Class Euro A2 - s1, d0
VOC content	< 0,1 g/l - UNI EN ISO 11890/2
VOC emission	< 2 $\mu\text{g}/\text{m}^3$ - UNI EN ISO 16000-6:2011
Heavy metal content	$\leq 0,00082\%$ (Cd, Pb, Hg, As, Cr) ICP-MS
Resistance to mould	Prevents the development of moulds - ASTM D 3273
Resistance to bacteria	Prevents the development of bacteria – JIS Z2801
Yield	In standard condition 10-12 m ² /kg per layer
Alkali resistance	No alteration of gloss or colour - ISO 2812-4
Humidity resistance	No damage - ISO 6270
Corrosion tests in artificial atmospheres Salt spray tests	Blistering degree (S_0) - No blistering Flaking degree (S_0) - No flaking

Methods of exposure to laboratory light sources

Blue scale > 7. From grade 1 (minimum solidity) to 8 (maximum solidity) - UNI EN ISO 16474-2:2014
 Grey scale: 5. From grade 1 (minimum solidity) to 5 (maximum solidity) - UNI EN ISO 16474-2:2014
 Chalking degree < 1. From 1 (minimum chalking) to 5 (maximum chalking) - UNI EN ISO 16474-2:2014

Technical details

Yield

Depends on the absorption and roughness of the surface and the tools used for the application.

In standard conditions, the yield is approximately 10-12 m²/kg for one layer.

Health and safety

Ingestion can cause irritation. Repeated ingestion can cause kidney damage.

Supply

Airlite Purelight Interior is provided in packages of 5 or 10 kg, or in 20 kg bags.

Precaution

Keep the container closed when not in use. Do not ingest.

Storage

Airlite Purelight Interior should be stored in dry places.

Duration

1 year, if it is stored appropriately, closed in the complete original packaging.

How to clean the tools

Clean the tools with water immediately after their use.

Colours

Airlite is available in a wide range of 100% mineral, high performance colors. Customised colours are available only for request.

Application

Airlite can be applied in a temperature between 2°C and 40°C with brush, roller or airless*. The applied paint dries completely 5 hours after its application on the surface (+20°C, 65% humidity). In low temperature and/or high level of humidity, the desiccation could be longer.

*For airless spray gun application, use a nozzle type 427-429 and a pressure of approx. 100/140 bar.

Finish

Opaque.

Caution

None.

First aid

In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes. In case of ingestion immediately seek medical advice. For further information, please make reference to the Security Sheet (MSDS).

KEEP LOCKED UP AND OUT OF THE REACH OF CHILDREN.

Tender Specification

Water based paint in powder form to dilute with water called Airlite Purelight Interior, which is anti-pollution, transpiring, antibacterial and self-cleaning, containing photocatalytic substances, ultra fine inert elements and special additives according to the D.M. Italian Ministry of Environment 01.04.2004. VOC content must be less than 0.1 g/l; high water permeability V1 – NF EN ISO 7783 higher than 430 g/m²/24h, heavy metal content, such as Cd, Hg, As, Pb, Cr is lower than 0,00082%. The yield of one layer is approximately 10-12 m²/kg. Furthermore, the product must prevent the development of mould and must be non-flammable, belonging to the A2-s1, d0 class of fire resistance. It must be diluted with clean water at least 75%.

LIMITED LIABILITY WARRANTY

AM Technology Ltd applied strict quality standards both during the production of our products and the description of the products and their use. The high quality of the product is guaranteed, at our discretion, we are willing to replace or reimburse the price of any faulty product. Satisfying results do not depend only on the product but on many other facts that are out of our control. Therefore, except the replacement or the reimbursement in case of a faulty product, AM Technology Ltd DOES NOT GIVE ANY OTHER GUARANTEES, explicit or implicit, including guarantee of ELIGIBILITY FOR A PURPOSE OR MARKETABILITY, regarding the actual PRODUCTS, AM Technology does not take any other responsibilities. Possible discontent about the product must be communicated in writing in one (1) year from the date of the delivery. No claims will be considered out of the specified time interval or claims that are not in writing. The client must determine the suitability of the product for the purpose of its use and accept all the possible risks and responsibilities. Any approved change on the printed directions of use of our product must bear the signature of the technical Director of AM Technology Ltd. All the recommendations and information above based on the actual knowledge and experience of AM Technology Ltd. Nevertheless, AM Technology Ltd does not take any responsibility for the communication of such information and recommendation, that regard the intellectual right of ownership of third parties, particularly patent protection.

In particular, AM Technology Ltd does not acknowledge any conditions or guarantees, EXPLICIT OR IMPLICIT, INCLUDING THE GUARANTEE OF SUITABILITY FOR A PURPOSE OR MARKETABILITY. AM Technology Ltd WILL NOT BE RESPONSIBLE FOR CONSEQUENT, INDIRECT OR ACCIDENTAL DAMAGES (including the loss of profit) of any kind. AM Technology Ltd reserves the right to make changes according to the technological progress or further developments. The client is responsible and obligated to case and verify with attention any incoming possible merchandise. The characteristics of the product or products described above must be verified by test and must be applied by a qualified person. The client has the exclusive responsibility to realize and control such tests. Commercial names used by other companies are neither recommendations, nor approval of any product and does not imply that other similar products cannot be used.

© 2018 AM Technology Ltd. 1 Mark Square, EC2A 4EG London

All the technical information included above is indicative, based on our experiences. The dates and the modalities present on the technical sheet can be modified any time, in case of improvements in the technology of the production. The application of the product being out of our control is the exclusive responsibility of the client. The technical assistance of AM Technology Ltd is available to provide supplementary information for the users.