D2 Airfield Protect WP 3001

Satin-finish, transparent 2-component epoxy resin emulsion sealant, type D2 according to construction industry standards
Guideline for Air Traffic Facilities (BFR 9021)

PRODUCT DESCRIPTION	D2 Airfield Protect WP 3001 is a 2-component, water-emulsified, transparent epoxy resin topcoat for application on thermosetting coatings type D2 according to the construction guideline for air traffic facilities (BFR 9021). D2 Airfield Protect WP 3001 is pleasant and environmentally friendly. It is easy to apply with a roller or a suitable airless sprayer. Curing occurs through drying and chemical cross-linking to form a robust film with excellent adhesion. The product contains no free bisphenol A or alkylphenols. D2 Airfield Protect WP 3001 improves the integration of quartz sands and other broadcast materials into the surface structure, thereby increasing the mechanical strength of the systems. The sealant forms a tough, abrasion-resistant film that exhibits good resistance to mechanical stress. The product exhibits good chemical resistance to aqueous solutions, diluted acids and alkalis, as well as to motor oil, heating oil, kerosene, and formate-based de-icing agents. However, prolonged exposure to certain chemicals may cause superficial staining. For specific resistance requirements, please seek individual consultation.
SCOPE	- As a colorless topcoat for D2 surfaces on air traffic areas according to BFR 9021.
PRODUCT FEATURES	- low-emission formulation - Total Solid according to GISCODE - low odor - uniform surface - environmentally friendly - very high liability - simple application
EXAMS	Test report (system test): Testing according to the "Construction Guidelines for Air Traffic Facilities (BFR 9021) (Edition 1999) – Surface Protection Layers of Airfield Surfaces" (Requirement: D2 coating)

PANEL STRUCTURE	Substrate preparation by milling or shot blasting and thorough vacuum. Apply D2 Airfield Protect EP 1000 primer using a squeegee, rubber squeegee, spatula, or nylon roller. Consumption is approximately 0.35 to 0.45 kg/m². To achieve a uniformly closed surface, roll over it again with a nylon roller. Optional scratch coat application for increased surface roughness to create a flat, non-porous subsoil, with D2 Airfield Protect EP 1000 and mixed sand 2/1 in a mixing ratio of 1 : 0.8 parts by weight, Consumption of mixture approx. 0.8 to 1.2 kg/m². Complete sanding of the primer or optional scratch coat with Quartz sand, grain size 0.3/0.8 mm, consumption at least 4.5 kg/m2. Completely sanded with quartz sand, grain size 0.3/0.8 mm, consumption at least 4.5 kg/m2. Apply a base coat of D2 Airfield Protect EP 2000 using a notched trowel (S6 notched trowel or Pajarito TKB-2), consumption 1.0 - 1.2 kg/m². Optional: Add 10 to 15% quartz sand 0.3/0.8 mm to D2 Airfield Protect EP 2000 and apply over the support grain, consumption 1.1 - 1.3 kg/m². Completely sand with quartz sand, grain size 0.7/1.2 mm, consumption at least 5 kg/m2. Sealing with D2 Airfield Protect WP 3001 using a nylon roller in a cross pattern or a suitable airless sprayer, consumption: 0.25 to 0.3 kg/m2 or colored topcoat sealing alternatively with D2 Airfield Protect WP 3000.
SUBGROUND	The substrate to be coated must be level, dry, dust-free, sufficiently strong in both tensile and compressive strength, and free of weakly adhering components and flaking. Substances that impair adhesion, such as grease, oil, and paint residues, must be removed beforehand using appropriate methods. Suitable substrates for coating are concrete C30/37 (exposure class XD1) or C35/45 (exposure class XD3). The substrates must possess sufficient strength for the intended use. The substrates to be coated must be prepared mechanically, by milling, or Shot blasting must be prepared. The absorbency must be checked. Surface strength must be at least 2.0 N/mm². The moisture content of concrete must not exceed 4.5 CM-%. Backward moisture penetration must be permanently prevented.

MIX	In combination containers, the factory-weighed material is present in the exact mixing ratio in one working pack. The container of component B has sufficient volume to hold the entire quantity. Empty component A completely into the hardener container B. Mixing is carried out mechanically with a slow-running mixer (200 to 400 rpm) and should take 2 to 3 minutes until a homogeneous, streak-free mixture is obtained. If diluting with water, components A and B must first be completely mixed. Only then add the water and homogenize again completely. To avoid mixing errors, it is recommended to always transfer the resin/hardener mixture into a clean container and briefly mix again ("transferring"). In case of partial withdrawal, the Stir the components and weigh them out in the mixing ratio. The processing time must not be exceeded (see table). "Processing time"). Caution: Pot life not discernible!
PROCESSING	As with all reactive resins, processing should begin immediately after mixing. Application is done with a paint roller or an airless sprayer. For example, the Airlessco HS9950 unit from b&m GmbH with HDP 500 and nozzle 523 (pressure 230 bar) is suitable. Further information on airless spraying can be obtained from AWT. can be obtained from KLB Kötztal or b&m GmbH. The temperature at the base and air must not fall below 15 °C, and the relative humidity must not exceed 75%. These recommended climatic conditions must also be maintained during curing and drying. The temperature difference between the base and room temperature must be less than 3 °C to ensure proper curing. If dew occurs, regular drying may be disrupted. This process may fail, resulting in curing problems and staining. Exposure to water and chemicals must be avoided for the first 7 days. The stated curing times refer to 20°C; at lower temperatures, processing and curing times will increase, while higher temperatures will shorten them. Failure to comply with the processing conditions may result in deviations in the described technical properties of the product. occur in the final product.
CLEANING	Use water to clean fresh soiling and to clean tools immediately after use. Hardened material can only be removed mechanically.

STORAGE	Store in a dry, frost-free place. Ideal storage temperature: 10 to 20 °C. Bring to the appropriate processing temperature before use. Tightly reseal opened containers and use as soon as possible.
SPECIAL INSTRUCTIONS/PROTECTIVE MEASURES	The product is subject to the Hazardous Substances Ordinance, which The German Ordinance on Industrial Safety and Health (Betriebssicherheitsverordnung) and the transport regulations for dangerous goods must be observed. The required information is contained in the DIN safety data sheet. Observe the labeling instructions on the container label! GISCODE: RE20 VOC content labeling: (EU Regulation 2004/42) Limit value 140 g/l (2010,II,j/wb): Product contains < 140 g/l VOC in its processed state.

EUROTEAM

TECHNICAL DATA *

TECHNICAL SPECIFICATIONS	UNIT	VALUE
Viscosity - Component A+B	mPas	Approximately 80
solids content	%.	> 35
Density - Component A+B	kg/l	Approximately 1.05
Tensile adhesion strength	N/mm²	> 2.0
Flash point		Non-flammable

Mixing ratio parts by weight	A : B = 1 : 3
Mixing ratio, parts by volume	A : B = 100 : 320
Processing time	15 °C : 40 min. 20 °C : 30 min. 30 °C : 20 min.
Processing temperature	Minimum 15 °C (air and ground temperature)
Curing time (walkability)	15 °C : 5 - 7 hrs. 20 °C : 3 - 4 hours 30 °C : 2 - 3 hours
Hardening	2-3 days until mechanical stress resistance is reached at 20°C 7 days until chemical resistance at 20 °C
Revarizability	After 18-24 hours, but no later than 48 hours, at 20 °C
consumption	Topcoat: Approx. 0.25 - 0.3 kg/m²
durability	12 months (original sealed) – Protect from frost!

*These figures are guidelines only. They are not intended for creating specifications.

The data were obtained at +23°C and 50% relative humidity. Higher temperatures and/or higher relative humidity may shorten or lengthen these times. All technical data, dimensions, and information in this datasheet are based on laboratory tests. Actual measured data may differ in practice.