

Art. Code see DDT

Date of issue 15.03.2010

Review nr. 01

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DESCRIPTION OF THE PRODUCT

Epoxy bonds, hardeners, substrate wetting additives.

FEATURES

UNIBAR FORMULA is characterized by low viscosity; therefore it has high power of penetration into the pores of the load dispatching layers (screeds).

The product is ready to use and, being free from solvents, can be used indoor and at yards located near inhabited districts.

When diluted with common denatured ethylic alcohol, which can be found in supermarkets and large-scale distribution stores, **UNIBAR FORMULA** has impregnating performance that reinforces in depth.

PHYSICAL FEATURES OF UNIBAR FORMULA

	Comp. A	Comp. B
Look	LIQUID	LIQUID
Colour	STRAW-YELLOW TRANSPARENT	TRANSPARENT
Density g/cm³	1.14	0.97
Viscosity (mPa.s)	800	100
Solid content	100	100

USE FIELDS

Depending on functional lacks of the load dispatching layer.

UNIBAR FORMULA, ready to use, can be used for the following:

- Anti-skinning for surfaces subject to be reduced;
- Superficial strengthening (thickness between 3 and 6 mm, depending on the porosity and weakness of the support);
- Impregnating;
- Waterproofing when there are dispatching layers free from vapour barrier.



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If the loading-dispatching layer - insubstantial and weak from a mechanical point of view - requires reinforcement in depth (over 6 mm) **UNIBAR FORMULA MUST BE DILUTED WITH ETHYLIC ALCOHOL** at the following doses:

COMPONENT A: 5 kg (PREMIXED) COMPONENT B: 2.5 kg (PREMIXED)

DENATURED ETHYLIC ALCOHOL: 3 I (to buy separately)

UNIBAR FORMULA is an elegant polyfunctional product and must be considered the basis for other products:

UNIBAR FORMULA APPLICATION DATA

Mixing ratio (in kg) of PREMIXED components	Comp. A+ Comp. B
A + B	5 kg + 2.5 kg
Status after mixing of component A, B	Liquid
Colour	Straw-yellow transparent
Density g/cm ³	1.1
Viscosity (mPa.s)	500
C&B DUE (g/l)	0
Interval of Application Temperatures	+ 10°C to +30°C
	120 MINUTES (+10°C)
Working life	90 MINUTES (+20°C)
	60 MINUTES (+30°C)
Hardening time	8 h (*30°C) to 12 h (+20°C)
Full achievement of final features	7 days

APPLICATION DATA OF UNIBAR FORMULA DILUTED WITH ETHYLIC ALCOHOL

PREMIXED A+B components mixing ratio (in kg)	Comp. A+ Comp. B + ALCOHOL
ALCOHOL (in I.)	5 kg + 2.5 kg + 3 lt.
Status after mixing of component A, B	Fluid Liquid
Colour	Transparent
Density g/cm³	1.00
Viscosity (mPa.s)	200
V.O.C. (g/l)	250
Interval of Application Temperatures	+ 10°C to +30°C
	90 MINUTES (+10°C)
Working life	60 MINUTI MINUTES (+20°C)
	30 MINUTES (+30°C)
Hardening time	12 to 24 h., depending on temperatures
Full achievement of final features	7 days

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WINKLER S.r.I. reserves the right to modify and up-date said data sheets without prior notice. Clients are kindly requested to verify that they are in possession of the current edition.



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UNIBAR FORMULA FINAL PERFORMANCES

Resistance to wet		Very good
Resistance to oils	(after 7 days)	Good
Resistance to solvents	(after 7 days)	Good

SURFACE PREPARATION

Accurately clean the support to eliminate: dust, oils, greases and foreign substances.

MIXING PROCESS OF THE COMPONENTS BEFORE APPLYING

- UNIBAR FORMULA preparation
- POUR COMPONENT **B** INTO COMPONENT **A** AND MIX WELL TO ACHIEVE A **HOMOGENEOUS FLUID**.
- PREPARATION OF **UNIBAR FORMULA DILUTED WITH ALCOHOL**

POUR COMPONENT **B** INTO COMPONENT **A** AND MIX WELL TO ACHIEVE A **HOMOGENEOUS FLUID**.

POUR 3 <u>LITRES</u> OF ALCOHOL IN A+B SOLUTION AND MIX SLOWLY TO ACHIEVE A VERY FLUID LIQUID.

APPLICATION

The product can be applied by brush and roller.

ANTI-SKINNING performance for surfaces subject to be reduced; apply 1 coat of UNIBAR FORMULA

SUPERFICIAL REINFORCEMENT IMPREGNATING ACTION: Apply 2 coats of UNIBAR FORMULA The application of the second coat must be made on wet surface.

WATERPROOFING PERFORMANCE for loading dispatching layers free from vapour barrier: apply **2 or more coats** of **UNIBAR FORMULA**.

The application of the second coat must be done when the first coat is fully hardened.



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As free from volatile compounds, further applications (self-levelling layers and epoxy finishing) after the use of UNIBAR FORMULA (not diluted with alcohol) can be made when the surface treated is step steady.

REINFORCEMENT IN DEPTH

Apply 2 or more coats of **UNIBAR DILUTED WITH ALCOHOL**, wet on wet, up to the saturation of porosities

LIMITS DUE TO MOISTURE

UNIBAR FORMULA used as vapour barrier to ensure the penetration into and the bonding of the support, **MUST** be used on grounds without overcoming the **RESIDUAL** wet of **max** 5%.

Do not use UNIBAR FORMULA as barrier to the vapour on grounds with counterthrust wet.

LIMITS DUE TO ENVIRONMENTAL CONDITIONS

Support temperatures lower than +10°C <u>HIGHLY</u> slow down the progressive hardening performances, therefore **do not apply the product at temperatures lower than the above mentioned ones**.

PLEASE DO NOT LEAVE THE TWO COMPONENTS (A and B) UNDER THE SUN (VANS, TRUCKS ...) AS THEY COULD BE OVERHEATED AND THAT CAN CAUSE THE DRASTIC LOWERING OF THEIR WORKING LIFE.

NEEDS LINKED TO THE TYPE OF PRODUCT

UNIBAR FORMULA, as all the products delivered as bicomponent, requires the right order of introduction of the two components, which are delivered **pre-batched**, and their perfect mixing before the application.

When **UNIBAR FORMULA** must act as deep hardener, and therefore must be further diluted with **ALCOHOL**, pour this last in **B + A mix**, in the dose suggested by the technical sheet (**B+A+ALCOHOL = 2.5 kg + 3 lt.**), and mix to achieve a homogeneous solution.

ONCE MIXED, THE PRODUCT UNIBAR FORMULA+ALCOHOL MUST BE APPLIED WITHIN THE WORKING LIFE TIMES SUGGESTED. INDEED, BEYOND THIS TIME, THE PRODUCTS UNDERGO EXOTHERMIC REACTION AND DEVELOPS HEAT UP TO 70°C.

THEREFORE MAKE INERT THE RESIDUAL PRODUCT SIMPLY POURING WATER ON IT AND LEAVING IT THERE UNTIL THE PRODUCT IS FULLY HARDENED.

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LIMITS LINKED TO THE OPERATIONAL CONDITIONS

LIMITS AS REGARDS THE PREPARATION OF THE PRODUCTS AS SKINNING-PROOF – STRENGTHENING – IMPREGNATING AGENT

The product **MUST NOT** be diluted with solvents in different percentages, when suggested by the technical sheet.

When surfaces are treated with **UNIBAR FORMULA + ALCOHOL**, we MUST WAIT for the FULL evaporation of ethylic alcohol, before adding new application layers (self-levelling layers and epoxy finishing).

WHEN UNIBAR FORMULA IS DILUTED WITH ALCOHOL, please ensure to work in a ventilated room.

CAUTIONS

The supports treated with these products, when a pavement laid with a bonding layer is previewed, need the use of bonds suitable for the chemical nature of **UNIBAR FORMULA** (epoxy – epoxy-polyurethane – polyurethane).

CONSUMPTION

UNIBAR FORMULA

ANTI-SKINNING ACTION: 150-300 gr/m² in only a coat.

SUPERFICIAL REINFORCEMENT IMPREGNATING PERFORMANCE: 400-600 gr/m² in 2 coats, wet on wet.

WATERPROOFING: 400-900 gr/m² in 2 or more coats; each coat after the first must be applied when the precedent one has hardened for 8-12 hours.

UNIBAR FORMULA DILUTED WITH ALCOHOL

REINFORCEMENT IN DEPTH: $600-1500 \text{ gr/m}^2$ in 2 coats, wet on wet until saturation of the support porosity.

UNIBAR FORMULA performance is affected by the porosity and unevenness of the support, both when applied alone and diluted with alcohol.

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TOOL MAINTENANCE

Clean tools with ethylic alcohol, before full hardening of the product.

PRE-BATCHED PACKAGING

PART A: 5 kg RESIN

PART B - HARDENER: 2.5 kg

STORAGE

The product in its undamaged packaging can be stored for 12 months. No frost-proof. Please store it at temperatures between +10°C and +35°C.

SAFETY INSTRUCTIONS

PRECAUTIONS

For information about safety, user must refer to the most recent Safety Data Sheet, edited in accordance with the regulations in force, which contains physical, toxic and other data about the product in use.

ECOLOGY

Do not through out the product and/or empty containers in the environment. Consult the most recent Safety Data Sheet for further information about disposals.