

## PRODUCT INFORMATION

### Asplit ET BEDDING MORTAR

#### PRODUCT DESCRIPTION

**Asplit ET BEDDING MORTAR** is a gray, three-component, cold curing synthetic mortar based on an epoxy resin and depending on the application with different fillers.

#### FIELDS OF APPLICATION

**Asplit ET BEDDING MORTAR** is suitable as bedding and jointing mortar for tiles, bricks and fittings made of ceramic to construct a chemically, thermally and mechanically resistant layer or lining.

Due to its dense state and good compatibility with the concrete, a special sealing layer may often be spared. The ceramic tiles can be bedded directly on the concrete substrate (on top of the applied primer) with **Asplit ET** using the two-bed jointing method. In addition, **Asplit ET** can be used on cement based substrates as filling and levelling mortar with the thicknesses of 2 to 5 mm as well as a thin **Asplit ET** protective coating (coating thickness of about 0.3 - 0.7 mm).

#### FEATURES

- Excellent adhesion to concrete and ceramic
- Good chemical resistance
- Nearly shrinkage-free curing
- Universal "all round" material

#### CHEMICAL RESISTANCE

Information on the chemical resistance properties is available upon request.

#### SUBSTRATE

Components shall be designed and manufactured in accordance with EN 14879-1. Before start of brick lining work, the suitability of the surface preparation measures according EN 14879-1 must be checked and recorded.

#### SURFACE PRE-TREATMENT

Unevenness or surface defects such as rock pockets, casting failures, laitance and other failures which degrade the rigidity of the surface shall be removed and repaired.

The repairs can be performed with **Asplit ET BEDDING MORTAR** or **Asplit ET TROWELLING**, on top of the primer application. Larger defects need to be remedied with **Asplit ET** notched trowel, **Asplit ET** screed or concrete to flatten. The steel structures connected to the component or mounted in the concrete have to be cleaned down to white metal (SA 2½).

#### Concrete and cement-base areas:

Appropriate action shall be taken to prepare the concrete surfaces; dry and free of dust and free of contaminants such as oil or grease. The concrete shall have minimum tensile strength of 1.5 N/mm<sup>2</sup>. The residual moisture in the concrete shall not exceed 4%. New casted concrete surfaces should be kept for at least 28 days to dry. All surfaces on the substrate shall be free of cracks.

#### ENVIRONMENTAL CONDITIONS

The specified environmental conditions must be observed during surface preparation and brick lining and be tested and recorded according EN 14879-6.

Environmental Conditions	Value
Relative Humidity	≤ 80%
Surface Temperature	≥ +10°C up to +30°C
Application Temperature	+20°C ± 5°C recommended
Dew Point Distance	min. 3K

#### APPLICATION

The execution of the brick lining work is only permitted, if the requirements of „Surface Pre-treatment“ and „Environmental Conditions“ are met.

#### Asplit ET PRIMER

**Asplit ET PRIMER** is applied onto the substrate or onto the lined membrane firmly and uniformly by means of a masonry brush, paste brush, paint brush, roller or paint pad. The consumption is about 300 to 400 g/m<sup>2</sup>.

#### Asplit ET BEDDING MORTAR

**Asplit ET BEDDING MORTAR** is applied with a trowel onto the substrate or onto the membrane. The installation of the tiles or bricks has to be performed as cavity-free as possible, as well as with full coverage and with hollow joint method. If the tiles are going to be installed with hollow joint method in alkaline joint mortars and are going to be grouted with **Asplit ET BEDDING MORTAR**, it should be noted that the base-membrane layer must be cured, acidified and dried upon acidifying. The open joints should have a perpendicular cross-section, at least 15 mm deep and 5 to 8 mm wide. The lateral faces of the tiles must be free of residue and the joints must be clean. With **Asplit ET CONDUCTIVE POWDER BLACK**, a dissipative layer of tiles can be achieved. In the two-bed method, first a 3 mm thick **Asplit ET** bed joint is applied onto the fresh or sanded primer layer. Within 60 minutes the acid-resistant bricks/tiles are covered underneath with 2 - 3 mm jointing mortar and then laid onto the fresh mortar bed. The surfaces of the mortar bed or joints need to be compacted to avoid any remaining air pockets. The entire thickness of the bedding should not exceed 10 mm.

#### WORK TOOLS

The following tools are essential for the application:

- Stirrer (max. 300 r/min.)
- Measuring cup & Mixing vessels
- Flat / wide brush / floor brush / paint pad
- Mortar trowel
- Grouting tool
- Miscellaneous (safety glasses, rubber gloves etc.)

## Asplit ET BEDDING MORTAR

### MIXING RATIO

Pour **Asplit ET SOLUTION** in a mixing vessel and add **Asplit ET HARDENER** at the specified mixing ratio. The stirring of the merged components should be at least 3 minutes and must result in a homogeneous mixture. Then add **ASPLIT ET** powders in the recommended mixing ratio to this mixture and stirrer again. The stirring of the merged components should be at least 3 minutes and must result in a homogeneous mixture. Then pour the mixture into a clean pail and mix again briefly. When mixing larger quantities, a forced mixer should be used.

Asplit ET PRIMER	Parts by Weight [kg]	Parts by Volume [Liter]
Asplit ET SOLUTION	100	2.00
Asplit ET HARDENER	20	0.45

Asplit ET BEDDING MORTAR	Parts by Weight [kg]	Parts by Volume [Liter]
Asplit ET SOLUTION	100	2.00
Asplit ET HARDENER	20	0.45
Asplit ET POWDER	700	11.20

Asplit ET JOINTING MORTAR	Parts by Weight [kg]	Parts by Volume [Liter]
Asplit ET SOLUTION	100	2.00
Asplit ET HARDENER	20	0.45
Asplit ET POWDER	619	9.90

Asplit ET BEDDING & JOINTING MORTAR CONDUCTIVE	Parts by Weight [kg]	Parts by Volume [Liter]
Asplit ET SOLUTION	100	2.00
Asplit ET HARDENER	20	0.45
Asplit ET POWDER CONDUCTIVE BLACK	250	3.73

### CONSUMPTION

Bedding and jointing (Bed Joint 5 mm / Cross Joint 5-7 mm)

Material	Sizes [mm]	Coverage [kg/m <sup>2</sup> ]
Tiles	240 x 115 x 20	ca. 17
Tiles	240 x 115 x 40	ca. 19
Bricks	240 x 115 x 65	ca. 22
Bricks	240 x 115 x 80	ca. 24

### POT LIFE (20°C)

Product	Time [min]
Primer	ca. 30 - 60
Bedding & jointing mortar	ca. 90

### CURING (20°C)

Load Capacity	Time
Accessible	ca. 16 h
Over workable	ca. 16 h
Chemical load	ca. 7 Days

### CLEANING

Clean all equipment with **Asplit CLEANER N** immediately after use. The cleaning is done while the material is still not hardened.

### SAFETY MEASURES

The material safety data sheets of the individual components, the safety instructions on the packing (label) as well as the legal requirements for handling hazardous materials must be observed.

### PACKING UNITS

The products are supplied in the following standard package sizes:

Product	Size	Article No.
Asplit ET HARDENER	5 kg	592 0520
Asplit ET HARDENER	20 kg	592 0510
Asplit ET SOLUTION	20 kg	592 0500
Asplit ET POWDER	25 kg	592 0530
Asplit ET POWDER CONDUCTIVE BLACK	25 kg	592 0540
Asplit CLEANER N	25 kg	592 0920
Asplit CLEANER N DEFOAMER	0.25 kg	592 0921

### STORAGE

The products must be stored in a cool and dry place, away from direct sunlight. At the specified storage temperatures a shelf life of the products is given of at least for the following periods:

Product	Temperature	Shelf Life
Asplit ET HARDENER	≤ +25°C	24 Months
Asplit ET SOLUTION	≤ +25°C	24 Months
Asplit ET POWDER	-	24 Months
Asplit ET POWDER CONDUCTIVE BLACK	-	24 Months
Asplit CLEANER N	-	24 Months
Asplit CLEANER N DEFOAMER	≤ +20°C	24 Months

If the storage time is exceeded, the materials must be tested before use. Higher storage and transport temperatures will reduce the shelf life. The containers must be kept tightly closed. Liquid products must be stored frost-proof. In addition, the DIN 7716 must be observed.

## Asplit ET BEDDING MORTAR

Technical Data	Standard	Unit	Value
Resistance to Ground	EN ISO 1081	$\Omega$	$\leq 1 \times 10^{6*}$
Flexural Strength	EN ISO 178	N/mm <sup>2</sup>	40
Density (Mixture)	EN ISO 2811 (ASTM D1475)	g/cm <sup>3</sup>	2.05
Compressive Strength	EN ISO 604	N/mm <sup>2</sup>	100
E-Modulus	-	N/mm <sup>2</sup>	$1.1 \times 10^4$
Coefficient of Thermal Expansion	-	1/K	$45 \times 10^{-6}$
Thermal Conductivity	-	W/(m • K)	1.7
Tensile Strength	EN ISO 527	N/mm <sup>2</sup>	40
Max. Operating Temperature	-	°C	+120

\* ET tiling black

**Note:** The indicated temperatures are dependent on the present load and may vary

Information given in the fact sheet above corresponds to the current knowledge available to us regarding our products at the time of its drafting and is intended as a guideline for informational purposes. However, because of the multiple possibilities regarding possible applications, processing and on site conditions, any information given in the fact sheet above is not legally binding, in particular, without being limited to, such information shall not be interpreted as a warranty of merchantability or of fitness for a particular purpose. Customer therefore is advised to conduct its own testing or make an inquiry with our technical department before ordering. We reserve the right to change the product at any time, in particular, without being limited to, minor changes because of advancements in technology. If by way of exception, the information given in the fact sheet above is incorporated by reference into any contract concluded with us under German Law, such information, shall only be interpreted as determining the specific requirements of the contractual products as set out in § 434 BGB (German Civil Code) and shall not be interpreted as constituting a guarantee of condition.

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TIP TOP Oberflächenschutz Elbe GmbH	Asplit ET BEDDING MORTAR	Revision 1.09 -10.06.2021
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