

PRODUCT INFORMATION

Asplit ET TROWELLING

PRODUCT DESCRIPTION

Asplit ET TROWELLING is a three-component, trowel applied coating based on an epoxy resin and depending on the application with different fillers.

FIELDS OF APPLICATION

Asplit ET TROWELLING is suitable to build up chemically, thermally and mechanically resistant linings. The **Asplit ET TROWELLING** has the following variations:

1. Thin trowelling
2. Self levelling trowelling, with or without reinforcement
3. Trowelling, conductive Filler black, cement trowelling, screed and concrete

FEATURES

- Excellent adhesion to concrete and ceramic
- Good chemical resistance
- Nearly shrinkage-free curing

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 coating 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/mm². 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 coating and be tested and recorded according EN 14879.

| 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 coating work is only permitted, if the requirements of „Surface Pre-treatment“ and „Environmental Conditions“ are met.

Asplit ET PRIMER

For all trowelled products the **Asplit ET PRIMER** is necessary. The **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 further bedding mortar can be applied immediately onto the fresh primer, otherwise after broadcasting crushed quartz sand onto the hardened primer layer. The consumption is about 300 to 400 g/m².

Asplit ET THIN TROWELLING

Onto the primer, the **Asplit ET THIN TROWELLING** is applied with a consumption of 3 l/m². With this consumption building a sealing layer with a thickness of 2 - 3 mm is possible. The hardened layer forms a seal, which is applied cross wise with lambswool rollers.

Asplit ET SELF LEVELLING TROWELLING

Asplit ET SELF LEVELLING TROWELLING is applied onto the primer with a consumption of 1.3 - 1.4 kg / m² per mm layer thickness by means of a notched smoothing trowel. The trapped air is removed by using a spiked roller.

For applying a fabric layer, a slide resistant fabric is laid on top of a 2nd layer of **Asplit ET PRIMER**. Thereafter, the application of the ET self levelling trowelling is carried out.

Asplit ET TROWELLING

Asplit ET TROWELLING is applied on floor surfaces approximately 4 - 6 mm and on wall surfaces approximately 3 - 4 mm thick in general. **Asplit ET TROWELLING** is applied onto the primer with a trowel. Plane levelling is achieved by means of level staff, grout spreader or smoothing/finishing trowels. With **Asplit ET POWDER CONDUCTIVE BLACK** or **Asplit ET POWDER CONDUCTIVE GRAY** a dissipative layer of tiles/bricks can be achieved. Copper strips or cords must be integrated into the mortar and connected to an earthing line.

Asplit ET CEMENT TROWELLING

The **Asplit ET CEMENT TROWELLING** is used for building layer thicknesses up to 8 mm. By using the **Asplit ET**, material components can be prepared by adding fillers of PC screed and PC concrete mixtures in masses. Such components are built in where thicker layers (> 8 mm) are required. It can be used in particular, as a screed to form levelling layers or slopes, as well as it can be used to fill dents and holes in the concrete structure.

The layer thicknesses should be built up at least three times thicker than the largest grain diameter. Likewise, the concrete mix can be used to manufacture stairways, pedestals, foundation or other rigid structures. In case of using gravel and sand aggregates, only washed and dried materials should be chosen. For mixing larger quantities a compulsory mixer is required.

Asplit ET TROWELLING

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
- Miscellaneous (safety glasses, rubber gloves etc.)

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 THIN TROWELLING | 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 SEALING | Parts by Weight [kg] | Parts by Volume [Liter] |
|-------------------------|----------------------|-------------------------|
| Asplit ET SOLUTION | 100 | 2.00 |
| Asplit ET HARDENER | 20 | 0.45 |
| Asplit POWDER FINE GRAY | 47 | 0.70 |

| Asplit ET SELF LEVELLING TROWELLING | Parts by Weight [kg] | Parts by Volume [Liter] |
|-------------------------------------|----------------------|-------------------------|
| Asplit ET SOLUTION | 100 | 2.00 |
| Asplit ET HARDENER | 20 | 0.45 |
| Asplit POWDER FINE GRAY | 50 | 0.75 |

| Asplit ET TROWELLING (floor area) | 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 TROWELLING (wall area) | Parts by Weight [kg] | Parts by Volume [Liter] |
|----------------------------------|----------------------|-------------------------|
| Asplit ET SOLUTION | 100 | 2.00 |
| Asplit ET HARDENER | 20 | 0.45 |
| Asplit ET POWDER | 675 | 10.80 |

| Asplit ET TROWELLING CONDUCTIVE BLACK | 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 | 180 | 2.69 |

| Asplit ET | Cement Trowelling [kg] | Screed [kg] | Concrete [kg] |
|----------------------------|------------------------|---------------|---------------|
| Asplit ET SOLUTION | 0.170 | 0.130 | 0.110 |
| Asplit ET HARDENER | 0.034 | 0.026 | 0.022 |
| Asplit ET POWDER | - | 0.450 | 0.380 |
| Washed river sand 0 - 3 mm | - | 0.450 | 0.380 |
| Washed gravel 3 - 7 mm | - | 0.700 | 0.600 |
| Washed gravel 7 - 15 mm | - | 0.500 | 0.400 |
| Washed gravel 15 - 30 mm | - | - | 0.400 |
| 1 Litre = ca. | 2.2 kg | 2.2 kg | 2.3 kg |

POT LIFE (20°C)

| Product | Time [min] |
|-------------------------------------|-------------|
| Primer | ca. 30 - 60 |
| Bedding & jointing mortar | ca. 90 |
| Cement trowelling, screed, concrete | ca. 120 |

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.

Asplit ET TROWELLING

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 POWDER FINE GRAY | 25 kg | 592 0560 |
| 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 POWDER FINE GRAY | - | 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.

| Technical Data | Standard | Unit | Value |
|----------------------------------|--------------------------|-------------------|---|
| Resistance to Ground | EN ISO 1081 | Ω | ≤ 1 x 10 ^{6****} / ≤ 1 x 10 ^{4*****} |
| Flexural Strength | EN ISO 178 | N/mm ² | 40 |
| Density (Mixture) | EN ISO 2811 (ASTM D1475) | g/cm ³ | 2.05 |
| Compressive Strength | EN ISO 604 | N/mm ² | 100 |
| E-Modulus | - | N/mm ² | 1.1 x 10 ⁴ |
| Coefficient of Thermal Expansion | - | 1/K | 45 x 10 ⁻⁶ |
| Thermal Conductivity | - | W/(m · K) | 1.7 |
| Tensile Strength | EN ISO 527 | N/mm ² | 40 |
| Max. Operating Temperature Dry | - | °C | +60 / +120** / +80***** |

** In combination with ceramic tiles or bricks *** Conductive gray **** conductive black ***** as trowel layer

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 TROWELLING | Revision 1.07 - 10.06.2021 |
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