



# PRODUCT INFORMATION Asplit ET PROTECTIVE COATING

# **PRODUCT DESCRIPTION**

**Asplit ET PROTECTIVE COATING** is a three-component thin coating based on an epoxy resin and depending on the application with different fillers.

# **FIELDS OF APPLICATION**

Asplit ET PROTECTIVE COATING is suitable for the protection of concrete surfaces with low mechanical stress. The total layer thickness of Asplit ET PROTECTIVE COATING is approx. 0.3 - 0.7 mm.

# **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  $2\frac{1}{2}$ ).

#### 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 coating work and be tested and recorded according EN 14879.

| <b>Environmental Conditions</b> | 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

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 consumption is about 300 to 400 g/m<sup>2</sup>.

# Asplit ET PROTECTIVE COATING

Asplit ET PROTECTIVE COATING is applied onto the primer layer or onto the previous layer cross-wise, firmly and uniformly by means of a masonry brush, paste brush, or roller. The pot life depends on the substrate and the ambient temperature. Usually two layers are applied. If necessary, a third layer can also be applied.

If acid-proof bricks or tiles are going to be lined over the **Asplit ET PROTECTIVE COATING**, flame dried silica sand (0.7 -1.2 mm) has to be broadcasted onto the very top fresh layer of the coating. The consumption is about 400 g /  $m^2$ . Exposure of the fresh protective coating to direct sunlight has to be avoided to prevent blistering. If possible, the coated surfaces may be shaded.

# 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<br>Weight [kg] | Parts by<br>Volume [Liter] |
|---|-------------------------|----------------------------|
| Asplit ET SOLUTION  | 100                     | 2.00                       |
| Asplit ET HARDENER  | 20                      | 0.45                       |
| 1 <sup>st</sup> layer Asplit ET<br>PROTECTIVE COATING<br>GRAY | Parts by<br>Weight [kg] | Parts by<br>Volume [Liter] |
| Asplit ET SOLUTION  | 100                     | 2.00                       |
| Asplit ET HARDENER  | 20                      | 0.45                       |
| Asplit POWDER FINE  | 40                      | 0.60                       |

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| 2 <sup>nd</sup> + 3 <sup>rd</sup> layer Asplit ET<br>PROTECTIVE COATING<br>GRAY | Parts by<br>Weight [kg] | Parts by<br>Volume [Liter] |
|---|-------------------------|----------------------------|
| Asplit ET SOLUTION  | 100                     | 2.00                       |
| Asplit ET HARDENER  | 20                      | 0.45                       |
| Asplit POWDER FINE<br>GRAY  | 60                      | 0.90                       |

## POT LIFE (20°C)

| Product                         | Time [min]  |
|---------------------------------|-------------|
| Asplit ET PRIMER                | ca. 30 - 60 |
| Asplit ET PROTECTIVE<br>COATING | ca. 30      |

# 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 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 POWDER FINE GRAY      | -           | 24 Months  |
| Asplit CLEANER N             | -           | 24 Months  |
| Asplit CLEANER N<br>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                 |
|----------------------------------|--------------------------|-------------------|-----------------------|
| Flexural Strength                | EN ISO 178               | N/mm²             | 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> | 1.4 x 10 <sup>4</sup> |
| Coefficient of Thermal Expansion | -                        | 1/K               | 45 x 10⁻ <sup>6</sup> |
| Thermal Conductivity             | -                        | W/(m • K)         | 1.7                   |
| Tensile Strength                 | EN ISO 527               | N/mm <sup>2</sup> | 40                    |
| Max. Operating Temperature Dry   | -                        | °C                | +60 / +120**          |

\*\* In combination with ceramic tiles or bricks

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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