PRODUCT INFORMATION
Asplit VEC

PRODUCT DESCRIPTION
Asplit VEC is a black, three-component, cold curing synthetic resin mortar, based on a Novolac vinyl ester resin with carbon fillers.

FIELDS OF APPLICATION
Asplit VEC is suitable for bedding and jointing of tiles, bricks and fittings, especially for chemical loads of concentrated acids, solvents and oxidizing medium. Furthermore, **Asplit VEC** has a good resistance against high temperatures and high mechanical stresses.
Main application fields are tiling and brick linings of components in the chemical industry, waste water and process water treatment, pulp and paper industry and pickling lines.

FEATURES
- Very good mechanical resistance
- Very good chemical resistance, especially against oxidizing agents / acids (chlorine bleach, nitric acid) , alkalis and solvents
- Fast curing
- Electrically conductive

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
Steel and concrete surfaces must be primed before application. The primer must be sanded in a fresh state after the final coat. Sealing layers, except VE or UP based layers, must be provided with a sanded primer before application of the synthetic mortar. Unevenness should be compensated in the ground.

C-STEEL
Surfaces must be clean, dry and free of contaminants. All contaminants, including non-visible detectable contaminants, must be removed in accordance with DIN TR 55684 and EN ISO 8502.
Non-alloyed steel surfaces shall be abrasive blasted to "Near White Metal" in accordance with EN ISO 12944-4. A surface preparation degree of SA 2½ (SSPC-SP 10; NACE No. 2) as specified in EN ISO 8501-1 and a “medium (G)” roughness degree as specified in EN ISO 8503-2 must be achieved. A minimum surface profile of $R_z \geq 70$ µm is required.
To prevent flash rust, the primer must be applied immediately after the blasting and cleaning of the substrate or the component must be air conditioned to a relative humidity of ≤ 40%.

CONCRETE
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 content must not exceed 4%.

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 VEC** is applied on the substrate or sealing layer by using a mortar trowel. Tiles and bricks must be free of voids, fully bedded and hollow jointed.

WORK TOOLS
The following tools are essential for the application:
- Stirrer (max. 300 r/min.)
- Measuring cup & Mixing vessels
- Flat / wide brush
- Mortar trowel
- Grouting tool
- Miscellaneous (safety glasses, rubber gloves etc.)

MIXING RATIO
Pour **Asplit VEC SOLUTION** in a mixing vessel and add **HARDENER No. 1 CLEAR** 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 VEC POWDER** 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.

PRIMER	Parts by Weight [kg]	Parts by Volume [Liter]
Asplit VEC SOLUTION	100	2.00
HARDENER No. 1 CLEAR	1.5	0.03

Asplit VEC	Parts by Weight [kg]	Parts by Volume [Liter]
Asplit VEC SOLUTION	100	2.00
HARDENER No. 1 CLEAR	1.5	0.03
Asplit VEC POWDER	180	5.24

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

Material	Sizes [mm]	Coverage [kg/m²]
Tiles	240 x 115 x 20	ca. 10
Tiles	240 x 115 x 40	ca. 13
Bricks	240 x 115 x 65	ca. 16
Bricks	240 x 115 x 80	ca. 18

Asplit VEC

POT LIFE (20°C)

Product	Time [min]
Asplit VEC	ca. 40

CURING (20°C)

Load Capacity	Time
Accessible	ca. 24 h
Chemical load	ca. 3 Days

CLEANING

Clean all equipment with **SOLVENT T-200** 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 VEC SOLUTION	20 kg	592 1020
Asplit VEC POWDER	25 kg	592 1030
HARDENER No. 1 CLEAR	0.1 kg	592 0181
HARDENER No. 1 CLEAR	0.4 kg	592 0019
SOLVENT T-200	4 kg	590 0610
SOLVENT T-200	8 kg	590 0611

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 VEC SOLUTION	≤ +20°C	6 Months
Asplit VEC POWDER	-	24 Months
HARDENER No. 1 CLEAR	≤ +20°C	12 Months
SOLVENT T-200	5 - 25°C	60 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 10^8
Flexural Strength	EN ISO 178	N/mm²	25
Density (Mixture)	EN ISO 2811 (ASTM D1475)	g/cm³	1.4
Compressive Strength	EN ISO 604	N/mm²	140
E-Modulus	-	N/mm²	0.6 x 10^4
Coefficient of Thermal Expansion	-	1/K	40 x 10^{-6}
Thermal Conductivity	-	W/(m • K)	1.0
Tensile Strength	EN ISO 527	N/mm²	10
Max. Operating Temperature Dry	-	°C	+120

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

TIP TOP Oberflächenschutz Elbe GmbH | Heuweg 4 | 06886 Wittenberg / Germany
Phone: +49 (0) 3491 635 50 | E-Mail: info@tiptop-elbe.de | Internet: www.tiptop-elbe.com