

SikaFast®-3161 (VP)

Long Open Time Structural Elastic Adhesive

Technical product data:

Colour Adhesive Activator Mix	Purple White or Black Purple or Black
Viscosity, cP @ 10 rpm spindle TE Adhesive Activator	700,000-850,000 185,000-225,000
Mix Ratio Adhesive:Activator By Volume By Weight	10:1 10:1.9
Specific Gravity (ASTMD792) g/cm ³ Adhesive Activator	1.00+/-0.1 1.85+/- .01
Open Time @ 22°C	55-90 min.
Gel Time @ 22°C	55-90 min.
Peak Exotherm Time	70-110 min.
Peak Exotherm Temperature	75°C-105°C
Fixture Time	
Application Temperature Range	10°C to 35°C
Tensile @ 22°C (ASTMD638) Strength N/mm ² Modulus N/mm ² Strain to Failure %	7.6-11 N/mm ² 150-200 N/mm ² >30
Lap Shear @ 22°C (ASTMD1002) in N/mm ² Galvanized Aluminium FRP*	>6.5 N/mm ² cohesive failure >6.5 N/mm ² cohesive failure >4.7 N/mm ² FRP failure*

¹⁾ Depends on fibre orientation of FRP

Description:

SikaFast®-3161 (VP) is a flexible, two component acrylic adhesive designed to efficiently transfer high loads and evenly distribute stresses. These characteristics distinguish SikaFast®-3161 (VP) from other acrylic adhesives that claim high strength and elongation.

SikaFast®-3161 (VP) bonds well with various substrates with little or no surface preparation or priming. SikaFast®-3161 (VP) has higher viscosity and longer open time to address the specific requirements of large scale applications.

- Excellent adhesion to a wide variety of substrates with little or no surface preparation
- Higher mixed viscosity for better gap filling
- Longer open time for large applications

Product benefits:

- High Strength
- High ductility
- Good dampening properties

Application:

SikaFast®-3161 (VP) is a 10:1 two part structural adhesive designed to substitute or complement welding, riveting, clinching and other mechanical fastening techniques used in the manufacturing of transportation vehicles.



SikaFast®-3161 (VP) is suitable for bonding sidewall panels, deck to hull, roofs, floors and parts made of aluminium, stainless or galvanized steel and fibre reinforced polymers. The material should be applied at 100 psi using an 18 element mixer.

Method of application:

Substrates: Surfaces should be clean and dry. Remove heavy oils and dirt with suitable solvent that will not harm substrate. Follow solvent manufacturers instructions and warnings for handling and use. Suitability of adhesive must be determined by laboratory test prior to application. Apply mixed adhesive to one substrate; mate other within the stated open time. Spacers may be used to ensure a uniform bond line. Glass beads are recommended, but at less than 4% of the adhesive volume. **However, to ensure maximum performance it is recommended to keep the spacers outside of the bond line.** Parts may be moved after the listed fixture time, however large, flexible parts may require more time. Allow for more cure time at lower temperatures; allow for less at higher temperatures.

Limitations:

SikaFast®-3161 (VP) will not bond polyolefin's such as polyethylene and polypropylene, polytetrafluoroethylene and other fluorine-containing polymers, polycetals, or nylon.

Adhesion to and compatibility with composites of these materials as well as other materials should be tested before using. Cure may be accelerated with heat but avoid temperatures over 43°C. Product will cure at temperatures well below 4°C, but will do so very slowly. CURED product is swollen by low molecular weight ketones and aldehydes, such as MEK.

Handling and Storage:

Keep away from heat, sparks, electrical equipment or other ignition sources. DO NOT SMOKE. Use only in well ventilated areas. Open doors and windows during use. Use proper fitted NIOSH respirator if ventilation is poor. Avoid direct contact. Wear chemical resistant gloves/goggles/clothing to prevent direct contact with skin and eyes. Remove contaminated clothing and launder before reuse. Wash thoroughly with soap and water after use. Stored in cool dry place at temperature between 4°C and 22°C in original sealed containers.

Packaging:

SikaFast®-3161 (VP) is available in 490ml dual cartridge, in 17.03 litre pails (Part A: SikaFast®-3161; Part B; SikaFast®-3083 and SikaFast®-3081) and in 170.3 litre drums (Part A SikaFast®-3161).

Shelf Life:

6 months in original sealed packaging when stored under cool, dry conditions.

Further information:

Copies of the following publications are available on request:
- Safety Data Sheets

Important:

For Information and advice on the safe handling, storage and disposal of chemical products, users should refer to the relevant Safety Data Sheet(s) containing physical, ecological, toxicological and other safety-related data for the appropriate type of substance.

Note:

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.



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