

Provisional Product Data Sheet

Version 01/2013 (05/2013)

SikaFast®-5215 NT

Fast-Curing, Two-Part Structural Adhesive

Technical Data

| | Comp. A: SikaFast®-5215 NT | Comp. B: SikaFast®-5200 |
|---|--|----------------------------|
| Chemical Base | Acrylate | |
| Colour (CQP ¹ 001-1) | White | Black |
| Colour - Mixed | Grey | |
| Cure Mechanism | Radical polymerisation | |
| Density (CQP 006-4) | 1.14 kg/L | 1.48 kg/L |
| Density - Mixed (Calculated) | 1.17 kg/L | |
| Mixing Ratio | By volume | 10 : 1 |
| | By weight | 10 : 1.3 |
| Consistency | Thixotropic paste | |
| Application Temperature | 5°C to 40°C | |
| Open Time ² (CQP 526-2) | 5 minutes approx | |
| Set Time (Time to reach 80% of final strength) | 15 minutes approx | |
| Shore A-Hardness (CQP 023-1/ISO 868) | 90 approx | |
| Shore D-Hardness (CQP 023-1/ISO 868) | 50 approx | |
| Tensile Strength ² (CQP 036-1/ISO 37) | 10 MPa approx | |
| Elongation at Break ² (CQP 036-1/ISO 37) | 200% approx | |
| Elastic Modulus ² (CQP 036-1/ISO 37) | 250 MPa approx | |
| Tensile Lap-Shear Strength ² (CQP 046-6/ISO 4587) | 10 MPa approx | |
| Glass transition temperature (CQP 509-1/ISO 6721-2) | 60°C approx | |
| Service Temperature | -40°C to 80°C | |
| Shelf Life ³ (CQP 016-1) | 50 ml cartridge - 15 months 250 ml cartridge - 9 months | |
| ¹ CQP = Corporate Quality Procedures; ² 23°C and 50% Relative Humidity; ³ Stored at temperatures below 25°C and not exposed to direct sunlight. | | |

Description

SikaFast®-5215 NT is a fast-curing, flexibilized, two-component structural adhesive, based on Sika's Acrylic Double Performance (ADP) polymer technology. Uncured SikaFast®-5215 NT is a pasty, non-sag, hardly inflammable material which allows for easy and precise application. SikaFast®-5215 NT is manufactured in accordance with the ISO 9001/14001 quality assurance system.

Product Benefits

- Strength development within minutes of application;
- Adhesion to a wide range of substrates with limited or no substrate preparation;
- High strength- and impact-resistance;
- Solvent- and acid-free;
- Lower odour than MMA-containing products;
- Easy to mix.



| Areas of Application | SikaFast®-5215 NT is a fast-curing, flexibilized structural adhesive, designed to replace mechanical fixings, such as rivets, screws and welding. It is suitable for high-strength fastening of concealed joints, and exhibits excellent adhesion on different types of substrates, including top-coats, plastics, glass, wood, etc. This product is suitable for experienced professional applicators only. Tests with actual substrates and conditions must be performed to ensure adhesion and material compatibility. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--|--|---------------------------------|--|--|----------|-----------------|-------|-------|---|--------|-----------------|---|-------|-----------------|---|--------|-------|-----|-------|-----|---|-------|-----|-----|--------|----|---|--------|
| Cure Mechanism | SikaFast®-5215 NT cures by radical chain polymerisation when mixed with SikaFast®-5200. Open and Set times are influenced by mixing ratio deviations as well as temperature, i.e. at high temperatures, the Open and Set times are shorter, and vice versa. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chemical Resistance | Cured SikaFast®-5215 NT is resistant to many chemicals. For specific information, contact the Technical Services Department of Sika Industry. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adhesion Results | <p>The following table summarizes Lap-Shear test results obtained with different substrates.</p> <p>These results are a guideline; due to the diversity of substrates, testing with actual substrates is required to confirm precise values.</p> | <table border="1"> <thead> <tr> <th colspan="3">Adhesion Table (typical values)</th> </tr> <tr> <th>Material</th> <th>FM¹</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>AlMg3</td> <td>C</td> <td>10 MPa</td> </tr> <tr> <td>Stainless Steel</td> <td>C</td> <td>8 MPa</td> </tr> <tr> <td>El. Galv. Steel</td> <td>C</td> <td>10 MPa</td> </tr> <tr> <td>Glass</td> <td>C/A</td> <td>9 MPa</td> </tr> <tr> <td>ABS</td> <td>A</td> <td>8 MPa</td> </tr> <tr> <td>PVC</td> <td>C/S</td> <td>10 MPa</td> </tr> <tr> <td>PC</td> <td>A</td> <td>10 MPa</td> </tr> </tbody> </table> <p>Lap-shear samples according to ISO 4587 bond-line thickness of 1.5 mm. ¹ Failure Mode: Adhesive, Cohesive, Substrate</p> | Adhesion Table (typical values) | | | Material | FM ¹ | Value | AlMg3 | C | 10 MPa | Stainless Steel | C | 8 MPa | El. Galv. Steel | C | 10 MPa | Glass | C/A | 9 MPa | ABS | A | 8 MPa | PVC | C/S | 10 MPa | PC | A | 10 MPa |
| Adhesion Table (typical values) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Material | FM ¹ | Value | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AlMg3 | C | 10 MPa | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stainless Steel | C | 8 MPa | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| El. Galv. Steel | C | 10 MPa | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glass | C/A | 9 MPa | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ABS | A | 8 MPa | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PVC | C/S | 10 MPa | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | A | 10 MPa | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surface Preparation | Surfaces must be clean, dry and free from grease, oil and dust. Remove all loose particles or residue by thorough cleaning. Due to the diversity of materials, preliminary tests with the actual substrates are required. Advice on specific applications and project-specific surface preparation requirements, including the possible need to use Sika® ADPrep, is available from the Technical Services Department of Sika Industry. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Application | SikaFast®-5215 NT is applied in a mixing ratio of 10:1 (+/- 10%) by volume through a 24-elements static mixer. A large volume of adhesive can generate heat by exothermic reaction. To avoid reaching excessive temperatures, bond-line thickness is limited to 3 mm; minimum bond-line thickness is 0.5 mm. The mixed adhesive has an Open Time of approximately 5 minutes and achieves handling strength (Set Time) in approximately 15 minutes. Optimum temperature for the bonding process is between 15°C and 25°C. The approved temperature range for substrate and adhesive is between 5°C and 40°C. The influence of temperature on reactivity must be respected. After the Open Time has elapsed, the bonded parts may no longer be adjusted. When the Set Time is reached, the parts can be moved -- provided no additional stress is placed on the bond line. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Removal | Excess material can best be removed before cure with a dry wipe. Uncured SikaFast®-5215 NT may be removed from tools and equipment with Sika® Remover-208 or other suitable solvent. Cured material can only be removed mechanically. Hands and exposed skin should be washed immediately using Sika® Handclean towels or other suitable industrial hand cleaner and water. Do not use solvents! | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Further Information | Copy of the following publication is available upon request: Material Safety Data Sheet. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Packaging | 50 ml dual cartridges; 250 ml dual cartridges. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Value Bases | All technical data stated in this Product Data Sheet are laboratory test-based. Current measured values may vary due to factors beyond our influence. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Industry

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the current Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data for the appropriate type of substance. Product Data Sheets and Material Safety Data Sheets are available on our website at: www.sika.ca or via your local Sika representative.



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, within their shelf life. 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 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 Product Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet under www.sika.ca.

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