Sikaflex®-252
ASSEMBLY ADHESIVE

Technical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Base</td>
<td>1-component Polyurethane</td>
<td></td>
</tr>
<tr>
<td>Colour (CQP 001-1)</td>
<td></td>
<td>White and Black</td>
</tr>
<tr>
<td>Cure Mechanism</td>
<td></td>
<td>Moisture-curing</td>
</tr>
<tr>
<td>Density (uncured) (CQP 006-4) (colour-dependent)</td>
<td></td>
<td>1.2 Kg/L approx</td>
</tr>
<tr>
<td>Non-sag Properties</td>
<td></td>
<td>Good</td>
</tr>
<tr>
<td>Application Temperature</td>
<td>ambient</td>
<td>10 °C to 35 °C</td>
</tr>
<tr>
<td>Tack-Free Time (CQP 019-1)</td>
<td></td>
<td>40 minutes</td>
</tr>
<tr>
<td>Open Time (CQP 526-1)</td>
<td></td>
<td>35 minutes</td>
</tr>
<tr>
<td>Curing Speed (CQP 049-1)</td>
<td></td>
<td>See diagram</td>
</tr>
<tr>
<td>Shrinkage (CQP 014-1)</td>
<td></td>
<td>6% approx</td>
</tr>
<tr>
<td>Shore A Hardness (CQP 023-1/ISO 868)</td>
<td></td>
<td>50 approx</td>
</tr>
<tr>
<td>Tensile Strength (CQP 036-1/ISO 37)</td>
<td></td>
<td>3 MPa approx</td>
</tr>
<tr>
<td>Elongation at Break (CQP 036-1/ISO 37)</td>
<td></td>
<td>400% approx</td>
</tr>
<tr>
<td>Tear Propagation Resistance (CQP 045-1/ISO 34)</td>
<td></td>
<td>7 N/mm approx</td>
</tr>
<tr>
<td>Tensile Lap-Shear Strength (CQP 046-1/ISO 4587)</td>
<td></td>
<td>2.5 MPa approx</td>
</tr>
<tr>
<td>Glass Transition Temperature (CQP 509-1/ISO 4663)</td>
<td></td>
<td>-40 °C approx</td>
</tr>
<tr>
<td>Volume Resistivity (CQP 079-2/ASTM D 257-99)</td>
<td></td>
<td>5 x 10^9 Ω cm approx</td>
</tr>
<tr>
<td>Service Temperature (CQP 513-1)</td>
<td>4 hours 1 hour</td>
<td>40 to 90 °C 130 °C 150 °C</td>
</tr>
<tr>
<td>Shelf Life (Storage below 25 °C) (CQP 016-1)</td>
<td>9 months</td>
<td></td>
</tr>
</tbody>
</table>

1 CQP = Corporate Quality Procedure; 2 25 °C and 50% Relative Humidity.

Description
Sikaflex®-252 is a non-sag, one-component polyurethane adhesive of stiff, paste-like consistency that cures on exposure to atmospheric humidity to form a durable elastomer. Sikaflex®-252 is manufactured in accordance with ISO 9001/14001 Quality Assurance System.

Product Benefits
- One-component formulation;
- Elastic;
- Can be over-painted;
- Good gap-filling properties;
- Capable of withstanding high dynamic stresses;
- Vibration-damping;
- Non-corrosive;
- Electrically non-conductive;
- Bonds well to a wide variety of substrates.

Areas of Application
Sikaflex®-252 is suitable for structural joints that will be subjected to dynamic stresses. Suitable substrate materials are timber, metals, particularly aluminium (including anodized components), sheet steel (including phosphated, chromated and zinc-plated components), metal primers and paint coatings (2-C systems), ceramic materials and plastics. Seek manufacturer’s advice before using on plastics that are prone to stress cracking. This product is suitable for professional experienced users only. Tests with actual substrates under real-life conditions are required to confirm adhesion and material compatibility.
Sikaflex®-252 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is lower and the curing reaction proceeds more slowly (See Diagram 1).

**Cure Mechanism**
Sikaflex®-252 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is lower and the curing reaction proceeds more slowly (See Diagram 1).

**Chemical Resistance**
Sikaflex®-252 is resistant to fresh water, seawater, limewater, sewage effluent, dilute acids and caustic solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; and not resistant to organic acids, alcohol, concentrated mineral acids, caustic solutions and solvents. The above information is offered for general guidance only. Please consult Sika Canada Inc.’s Technical Services for advice on specific applications.

**METHOD OF APPLICATION**

**Surface Preparation**
Surfaces must be clean, dry and free from grease, oil and dust. Substrates must be prepared in accordance with the instructions given in the Sika Pre-treatment Chart. Advice on specific applications is available from the Technical Services department of Sika Industry.

**Application**
Do not apply at temperatures below 10 °C or above 35 °C. The optimum temperature for substrate and adhesive is between 15 °C and 25 °C. For cartridge application, we recommend the use of a compressed air piston-type cartridge gun. To ensure uniform thickness of adhesive when compressed, we recommend that the adhesive be applied in the form of a triangular bead (see illustration). For advice on selecting and setting up a suitable pump system, contact the System Engineering department of Sika Industry.

**Tooling and Finishing**
Tooling and finishing must be carried out within the tack-free time of the adhesive. We recommend the use of Sika® Tooling Agent N. Other finishing agents or lubricants must first be tested for compatibility.

**Removal**
Uncured Sikaflex®-252 may be removed from tools and equipment with Sika® Remover-208 or other suitable solvent. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using Sika® Handclean towels or a suitable industrial hand cleaner and water. Do not use solvents!

**Over-painting**
Sikaflex®-252 can be overpainted after a skin forms. In the event the paint requires a bake process, it may be necessary to wait for a full cure. One-component polyurethane and two-component acrylic-based paints are usually suitable. Oil-based paints, however, are not suitable. All paints must be tested via preliminary trials under actual manufacturing conditions. Because the elasticity of paints is lower than that of polyurethanes, cracking of the paint film in the joint area is possible.

**Further Information**
Copies of the following publications are available upon request:
- Safety Data Sheet
- Sika Pre-treatment Chart Polyurethane
- General Guidelines Bonding and Sealing with Sikaflex® and SikaTack®

**Packaging**
300 ml cartridges; 400 and 600 ml sausages; 23 L Pail; 195 L Drums

**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.

**Health and Safety Information**
For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

**KEEP OUT OF REACH OF CHILDREN**
FOR INDUSTRIAL USE ONLY

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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca.

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