Sikadur 51 NS
Flexible epoxy control-joint sealer/adhesive

**Description**
Sikadur 51 NS is a 2-component, non-sagging, solvent-free, moisture-tolerant, flexible epoxy control joint sealer and adhesive.

**Where to Use**
- Use to fill vertical and overhead non-moving, saw-cut construction control joints and cracks.
- Use as a flexible adhesive.

**Advantages**
- 2 to 1 ratio ensures easy mixing, easy handling.
- An adhesive with excellent flexibility.
- Excellent durability.
- Conforms to ACI 302.1R (4.10-Joint Materials).
- Shock-absorbent cure.
- Prevents deterioration of control-joint edges.
- Use as a security sealant.
- Use as a pick proof sealant.

**Coverage**
1 gal. will yield 231 cu. in. or will fill 102 ft. of 1/8 in. wide x 1.5 in. deep joint.

**Packaging**
3 gallon units.

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**Typical Data Material and curing conditions @ 73°F (23°C) and 50% R.H.**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelf Life</td>
<td>2 years in original, unopened containers</td>
</tr>
<tr>
<td>Storage Conditions</td>
<td>Store dry at 40°-95°F (4°-35°C). Condition material to 65°-85°F (18°-29°C) before using.</td>
</tr>
<tr>
<td>Color</td>
<td>Concrete gray</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Comp. ‘A’ 300,000-350,000 cps Comp. ‘B’ 29,000-31,000 cps Mixed Non-sag paste</td>
</tr>
<tr>
<td>Pot Life</td>
<td>1-1.5 hours</td>
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<tr>
<td>Tack-Free Time</td>
<td>7-8 hours</td>
</tr>
<tr>
<td>Tensile Properties (ASTM D-638) 14 days</td>
<td>Tensile Strength 650 psi (3.9 MPa) Elongation at Break 80% Modulus of Elasticity 1,800 psi (12.4 MPa) Tensile stress at % elongation 2.5% 5% 10% 50 psi (0.35 MPa) 90 psi (0.62 MPa) 160 psi (1.10 MPa)</td>
</tr>
<tr>
<td>Tear Resistance (ASTM D-624) 14 days</td>
<td>110 lb./in. (19.4 N/mm)</td>
</tr>
<tr>
<td>Hardness (ASTM D-2240) 28 days</td>
<td>(Shore A) 75-80 (Shore D) 30-40</td>
</tr>
</tbody>
</table>

**How to Use**

**Surface Preparation**
Substrate must be clean and sound. It may be dry or damp, but free of standing water. Remove dust, lai-
tance, grease, curing compounds, impregnations, waxes, foreign particles, disintegrated materials, etc., by mechanical means (i.e. sandblasting, high pressure waterblasting).

**Mixing**
Pre-mix each component. It is critical to accurately proportion 2 parts Component ‘A’ and 1 part Compo-
nent ‘B’ by volume into a clean pail. Mix thoroughly for 3 minutes with a Sika Paddle on a low-speed (400-
600 rpm) drill until uniform in color. Mix only that quantity which can be used within pot life.
Application
For vertical or overhead applications, gun Sikadur 51 NS into construction/control joints and cracks with caulking gun, pressure extruder, or other suitable methods. Be sure to maintain steady pressure and steady flow of material, filling entire joint in a single application. Take care to eliminate overlapping as this may cause bubbling within the material. For use as a flexible adhesive, consult Sika Technical Service at 800-933-SIKA.

Limitations
- Do not thin Sikadur 51 NS. Addition of solvents may prevent proper cure.
- Substrate temperature should be 40°F (4°C) minimum and rising.
- For best results, materials should be maintained between 65°-85°F (18°-29°C) during application
- Do not apply through standing water.
- Minimum age of concrete is 28 days.
- Materials are vapor barriers after cure.
- Concrete or masonry must be tested for water-vapor transmission prior to application.
- Not designed for use under constant immersion in water or other liquids.
- Do not use in expansion (moving) joints.
- For application in non-moving joints only.
- The ultimate performance of Sikadur 51 NS depends upon many factors, [i.e., proper joint design, thermally stable areas, (concrete slab), etc.].
- For applications other than sealing of control or construction joints, consult Sika Technical Service at 800-933-SIKA.
- Not an aesthetic product. Color may alter due to variations in lighting and/or UV exposure.

Caution
Component 'A' - Sensitizer; Irritant - Contains epoxy resins. May cause skin/respiratory irritation. Pro-longed and/or repeated contact with skin may cause allergic reaction/sensitization. High concentrations of vapor may cause respiratory irritation. Avoid eye contact. Harmful if swallowed.
Component 'B' - Corrosive; Sensitizer - Contains amines and crystalline silica. Contact with skin and eyes can cause severe burns. Respiratory irritant. Possible sensitization/allergic reaction with prolonged exposure. High concentrations of vapor may cause respiratory irritation. If product is sanded or abraded after curing, crystalline silica dust can be inhaled and cause delay lung injury (silicosis). Harmful if swallowed.
Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

First Aid
Eyes - rinse thoroughly with water for 15 minutes; remove contaminated clothing. Skin - wash skin with soap and water. Wash clothing before reuse. Inhalation - remove person to fresh air. Ingestion - Do not induce vomiting. Contact a physician. In all cases, contact a physician if symptoms persist.

Handling and Storage
Avoid direct contact with eyes and skin. Wear chemical resistant gloves/goggles/clothing. Avoid breathing vapors. Use with adequate general and local ventilation. In the absence of adequate ventilation, use a properly fitted NIOSH respirator. Wash thoroughly after handling product. Remove contaminated clothing and launder before reuse. Store product in closed container in cool, dry, well ventilated place.

Clean Up
Avoid contact. Uncured material can be removed with soap and water or solvent. Follow solvent manufacturer's instructions for use and warnings. Cured product can only be removed mechanically. Consult a physician if material cures on skin. Wear chemical resistant clothing/gloves/goggles. In the absence of adequate ventilation, use a properly fitted NIOSH respirator. In case of spill, ventilate area. Collect spill, collect with absorbent material and transfer to sealed containers. Dispose of in accordance with current, applicable local, state and federal regulations.