

# PRODUCT DATA SHEET

## Sikafloor®-359 N

TWO PART PUR TOUGH ELASTIC COLOUR SEAL COAT  
(ONLY TO BE APPLIED BY A SIKA APPROVED CONTRACTOR)

### PRODUCT DESCRIPTION

Sikafloor-359 N is a two part tough-elastic, coloured, non-yellowing, crack bridging seal coat with polyurethane

#### USES

- Abrasion resistant seal coat with high mechanical resistance for broadcast systems with crack-bridging properties in industrial flooring
- Particularly suitable for car park decks, broadcasts systems, ramps and warehouses etc.

#### CHARACTERISTICS / ADVANTAGES

- High resistance to abrasion and mechanical stress
- Tough-elastic
- Good mechanical and chemical resistance
- Watertight
- Good opacity
- Non-yellowing
- Matt finish
- Easy application
- Slip resistant surface possible

### TESTS

Certified as part of the Surface Protection System OS 11a according to DIN EN 1504-2 and DIN V 18026.

### APPROVAL / STANDARDS

Certified as part of the Surface Protection System OS 11b according to DIN EN 1504-2 and DIN V 18026.

### PRODUCT DATA

#### FORM

Polyurethane

#### COLOUR

Resin - Part A: Coloured, liquid  
Hardener - Part B: Transparent, liquid  
RAL 7038

A limited range of RAL colours also available on special order

|   |   |                  |                 |           |       |                        |       |                         |        |
|---|---|------------------|-----------------|-----------|-------|------------------------|-------|-------------------------|--------|
|   | <p><b>PACKAGING</b></p> <p>Part A: 25.35kg containers<br/> Part B: 7.15kg containers<br/> Part A+B: 32.5kg ready to mix units</p>   |                  |                 |           |       |                        |       |                         |        |
| <b>STORAGE</b>                          | Twelve (12) months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.  |                  |                 |           |       |                        |       |                         |        |
| <b>TECHNICAL DATA</b>                   | <p><b>DENSITY</b></p> <p>Part A: ~ 1.67kg/l<br/> Part B: ~ 1.05kg/l<br/> Mixed resin: ~ 1.45kg/l</p> <p>(DIN EN ISO 2811-1)</p> <p>All Density values at +20°C.</p> <p><b>SOLIDS CONTENT</b></p> <p>~ 85% (by volume) / ~ 85% (by weight)</p>   |                  |                 |           |       |                        |       |                         |        |
| <b>MECHANICAL / PHYSICAL PROPERTIES</b> | <p><b>BOND STRENGTH</b></p> <p>&gt; 1.5N/mm<sup>2</sup> (ISO 4624)</p> <p><b>SHORE D HARDNESS</b></p> <p>52 (7 days / +23°C)(DIN 53 505)</p> <p><b>ABRASION RESISTANCE</b></p> <p>160mg (CS 10/1000/1000), (7 days / +23°C), (DIN 53 109 (Taber Abrader Test))</p> <p><b>RESISTANCE</b></p> <p><b>CHEMICAL RESISTANCE</b></p> <p>Resistant to many chemicals. Please ask for a detailed chemical resistance table.</p> <p><b>THERMAL RESISTANCE</b></p> <table border="0"> <tr> <td><b>*EXPOSURE</b></td> <td><b>DRY HEAT</b></td> </tr> <tr> <td>Permanent</td> <td>+50°C</td> </tr> <tr> <td>Short term max. 7 days</td> <td>+80°C</td> </tr> <tr> <td>Short term max. 4 hours</td> <td>+100°C</td> </tr> </table> <p>Short-term moist/wet heat* up to +80°C where exposure is only occasional (high pressure water jetting etc.)</p> <p>*No simultaneous chemical and mechanical exposure.</p> | <b>*EXPOSURE</b> | <b>DRY HEAT</b> | Permanent | +50°C | Short term max. 7 days | +80°C | Short term max. 4 hours | +100°C |
| <b>*EXPOSURE</b>                        | <b>DRY HEAT</b>   |                  |                 |           |       |                        |       |                         |        |
| Permanent                               | +50°C   |                  |                 |           |       |                        |       |                         |        |
| Short term max. 7 days                  | +80°C   |                  |                 |           |       |                        |       |                         |        |
| Short term max. 4 hours                 | +100°C  |                  |                 |           |       |                        |       |                         |        |

## System Information

|                         |  |
|-------------------------|--|
| <b>SYSTEM STRUCTURE</b> | <p><u>Broadcast coloured flexible coating:</u></p> <p>Primer: Sikafloor -156 / Sikafloor-161<br/> Broadcasting: Broadcast to excess with Sika Aggregate 501<br/> Seal coat: Sikafloor -359N</p> <p><u>Broadcast highly crack-bridging coloured screed (OS 11a, according to DAfStb Rili-SIB 2001):</u></p> <p>Primer: Sikafloor-156 / Sikafloor-161 lightly broadcast with Sika Aggregate 501<br/> Base coat: Sikafloor-350 Elastic<br/> Wearing course: Sikafloor-375 (filled with 20% Sika Aggregate 508)<br/> Broadcast to excess with Sika Aggregate 501</p> |
|-------------------------|--|

Seal coat: Sikafloor-359 N

*Broadcast coloured flexible screed (OS 11b, according to DAfStb Rili-SIB 2001):*

Primer: Sikafloor-156 / Sikafloor-161 lightly broadcast Sika Aggregate 501

Wearing course: Sikafloor-350 N Elastic (filled with 20% Sika Aggregate 508)

Broadcast to excess with Sika Aggregate 501

Seal coat: Sikafloor-359 N

For application on inclined / sloping surfaces:

*Use the same systems as described with the addition of Sika® Extender T as stated below.*

## CONSUMPTION / DOSAGE

### BROADCAST COLOURED FLEXIBLE COATING:

| Coating System | Product   | Consumption                  |
|----------------|---|------------------------------|
| Primer         | Sikafloor-156 /<br>Sikafloor-161                  | ~ 0.3 - 0.5kg/m <sup>2</sup> |
|                | Broadcast to excess<br>with Sika Aggregate<br>501 | ~ 6 – 8kg/m <sup>2</sup>     |
| Seal coat      | Sikafloor-359 N                                   | ~ 0.7 – 0.9kg/m <sup>2</sup> |

### BROADCAST HIGHLY CRACK-BRIDGING COLOURED SCREED (OS 11A, ACCORDING TO DAFSTB RILI-SIB 2001):

| COATING SYSTEM              | PRODUCT   | CONSUMPTION   |
|-----------------------------|---|---|
| Primer (lightly<br>blinded) | Sikafloor-156 /<br>Sikafloor-161                  | ~ 0.3 - 0.5kg/m <sup>2</sup><br>~ 0.8kg/m <sup>2</sup>  |
|                             | Sika Aggregate 508                                |   |
| Base coat                   | Sikafloor-350 Elastic                             | ~ 2.2kg/m <sup>2</sup>  |
| Wearing course              | Sikafloor-375 filled                              | ~ 1.86kg/m <sup>2</sup> (1.55kg/m <sup>2</sup><br>binder + 0.31kg/m <sup>2</sup> Sika<br>Aggregate 508) |
|                             | Broadcast to excess<br>with Sika Aggregate<br>501 | ~ 6 – 8kg/m <sup>2</sup>  |
| Seal coat                   | Sikafloor-359 N*                                  | ~ 0.7 - 0.9kg/m <sup>2</sup>  |

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**BROADCAST COLOURED FLEXIBLE SCREED (OS 11B, ACCORDING TO DAFSTB RILI-SIB 2001)**

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| Coating System           | Product                                     | Consumption   |
|--------------------------|---|---|
| Primer (lightly blinded) | Sikafloor-156 /                             | ~ 0.3 - 0.5kg/m <sup>2</sup>  |
|                          | Sikafloor-161                               | ~ 0.8kg/m <sup>2</sup>  |
|                          | Sika Aggregate 501                          |   |
| Wearing course           | Sikafloor-350 N                             | ~ 2.40kg/m m <sup>2</sup> (2.00kg/m <sup>2</sup> binder + 0.40 kg/ m <sup>2</sup> Sika Aggregate 508) |
|                          | Broadcast to excess with Sika Aggregate 501 | ~ 6 - 8kg/m <sup>2</sup>  |
| Seal coat                | Sikafloor-359 N*                            | ~ 0.7 - 0.9kg/m <sup>2</sup>  |
| Coating System           | Product                                     | Consumption   |

These figures are theoretical and do not allow for any additional material due to application technique, surface porosity, surface profile, variations in level and wastage etc.

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**SUBSTRATE QUALITY**

The concrete substrate must be sound and of sufficient compressive strength (minimum 25N/mm<sup>2</sup>) with a minimum pull off strength of 1.5N/mm<sup>2</sup>.

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

If in doubt, apply a test area first.

**SURFACE PREPARATION**

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.

Repairs to the substrate, filling of blowholes/voids and surface levelling can be carried out using appropriate products from the Sikafloor, SikaDur and SikaGard range of materials.

The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.

High spots must be removed by e.g. grinding.

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

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**APPLICATION CONDITIONS / LIMITATIONS****SUBSTRATE TEMPERATURE**

+10°C min. / +30°C max.

**AMBIENT TEMPERATURE**

+10°C min. / +30°C max.

**SUBSTRATE MOISTURE CONTENT**

≤ 4% pbw moisture content.

Test method: Sika<sup>®</sup>-Tramex meter, CM – measurement or Oven-dry-method.

No rising moisture according to ASTM (Polyethylene-sheet).

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**RELATIVE AIR HUMIDITY**

80% r.h. max.

**DEW POINT**

Beware of condensation!

The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation or blooming on the floor finish.

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**APPLICATION INSTRUCTIONS****MIXING**

Part A : part B = 78 : 22 (by weight)

**MIXING TIME**

Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 3 minutes until a uniform mix has been achieved.

To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix.

Over mixing must be avoided to minimise air entrainment.

**MIXING TOOLS**

Sikafloor-359 N must be thoroughly mixed using a low speed electric stirrer (300 - 400rpm) or other suitable equipment.

**CLEANING OF TOOLS**

Clean all tools and application equipment with Sika Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.

**POTLIFE****TEMPERATURES****TIME**

+10°C

~ 40 minutes

+20°C

~ 25 minutes

+30°C

~ 15 minutes

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**WAITING TIME / OVERCOATING**

Before applying Sikafloor®-359 N on Sikafloor®-350 broadcast allow:

| Substrate temperature | Minimum  | Maximum |
|-----------------------|----------|---------|
| +10°C                 | 24 hours | *       |
| +20°C                 | 15 hours | *       |
| +30°C                 | 8 hours  | *       |

Before applying Sikafloor®-359 N on Sikafloor®-375 broadcast allow:

| Substrate temperature | Minimum  | Maximum |
|-----------------------|----------|---------|
| +10°C                 | 24 hours | *       |
| +20°C                 | 10 hours | *       |
| +30°C                 | 5 hours  | *       |

\* No max. waiting time if fully broadcast surface is free from all contaminations.

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

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**NOTES ON APPLICATION / LIMITATIONS**

Freshly applied Sikafloor-359 N must be protected from damp, condensation and water for at least 24 hours.

Sikafloor-359 N applied at different thicknesses can lead to different degrees of matt finish.

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Sikafloor®-359 N

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Sikafloor-359 N - PDS - 1015 repl 0913

Asia Pacific | NZ

Flooring

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO<sub>2</sub> and H<sub>2</sub>O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

*Tools*

Recommended Supplier of Tools:  
 PPW-Polyplan-Werkzeuge GmbH, Phone: +49 40/5597260,  
 www.polyplan.com.

The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

For exact colour matching, ensure the Sikafloor-359 N in each area is applied from the same control batch numbers.

**CURING DETAILS**

**APPLIED PRODUCT READY FOR USE**

| TEMPERATURE | FOOT TRAFFIC | LIGHT TRAFFIC | FULL CURE |
|-------------|--------------|---------------|-----------|
| +10°C       | ~ 48 hours   | ~ 5 days      | ~ 10 days |
| +20°C       | ~ 24hours    | ~ 3 days      | ~ 7 days  |
| +30°C       | ~ 16 hours   | ~ 2 days      | ~ 3 days  |

Note: Times are approximate and will be affected by changing ambient conditions.

**CLEANING / MAINTENANCE**

To maintain the appearance of the floor after application, Sikafloor-359 N must have all spillages removed immediately and must be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc. using suitable detergents and waxes.

Please refer to “Cleaning & Maintenance Recommendations for Sika Floor Installations” for detailed instructions.

**VALUE BASE**

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

**LOCAL RESTRICTIONS**

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

**HEALTH AND SAFETY INFORMATION**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

**LEGAL NOTES**

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 accordance with Sika’s recommendations. 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 user of the product must test the product’s suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations.



## CE LABELLING

The harmonized European Standard EN 13 813 'Screed material and floor screeds - Screed materials - Properties and requirements' specifies requirements for screed materials for use in floor construction internally. Structural screeds or coatings, i.e. those that contribute to the load bearing capacity of the structure, are excluded from this standard. Resin floor systems as well as cementitious screeds fall under this specification. They have to be CE-labelled as per Annex ZA. 3, Table ZA.1.5 and 3.3 and fulfil the requirements of the given mandate of the Construction Products Directive (89/106):

|  |                               |
|--|-------------------------------|
| <b>CE</b>  |                               |
| Sika (NZ) Ltd<br>85-91 Patiki Road, Avondale<br>Auckland, New Zealand                |                               |
| 07 <sup>1)</sup>   |                               |
| EN 13813 SR-B1,5-AR1-IR 4  |                               |
| Resin screed/coating for indoors in buildings<br>(systems as per Product Data Sheet) |                               |
| Reaction to fire:  | E <sub>fl</sub> <sup>2)</sup> |
| Release of corrosive substances<br>(Synthetic Resin Screed):                         | SR                            |
| Water permeability:  | NPD <sup>2)</sup>             |
| <b>Abrasion Resistance:</b>  | AR1 <sup>4)</sup>             |
| <b>Bond strength:</b>  | B 1,5                         |
| <b>Impact Resistance:</b>  | NPD                           |
| Sound insulation:  | NPD                           |
| Sound absorption:  | NPD                           |
| Thermal resistance:  | NPD                           |
| Chemical resistance:   | NPD                           |

<sup>1)</sup> Last two digits of the year in which the marking was affixed.

<sup>2)</sup> Min. classification, please refer to the individual test certificate.

<sup>3)</sup> No performance determined.

<sup>4)</sup> Not broadcast with sand.

## CE LABELLING

The harmonized European Standard EN 1504-2 „Products and systems for the protection and repair of concrete structures – Definitions, requirements, quality control and evaluation of conformity – Part 2 : Surface protection systems for concrete” gives specifications for products and systems used as methods for the various principles presented under EN 1504-9.

Products which fall under this specification have to be CE-labelled as per Annex ZA. 1, Tables ZA.1a to ZA 1g according to the scope and relevant clauses there indicated, and fulfil the requirements of the given mandate of the Construction Products Directive (89/106):

Here below indicated are the minimum performance requirements set by the standard. For the specific performance results of the product to the particular tests, please see the actual values above in the PDS.

|   |   |
|---|---|
| <b>CE</b>   |   |
| 0921  |   |
| Sika (NZ) Ltd<br>85-91 Patiki Road, Avondale<br>Auckland, New Zealand |   |
| 08 <sup>1)</sup>  |   |
| 0921-CPD-2017   |   |
| EN 1504-2   |   |
| Surface Protection Product<br>Coating <sup>2)</sup>                   |   |
| Abrasion resistance (Taber test):                                     | < 3000mg                                    |
| Permeability to CO <sub>2</sub> :                                     | S <sub>D</sub> > 50m                        |
| Permeability to water vapour:   | Class II                                    |
| Capillary absorption and permeability to water:                       | w < 0.1kg/m <sup>2</sup> x h <sup>0.5</sup> |
| Resistance to severe chemical attack: <sup>3)</sup>                   | Class I                                     |
| Impact resistance:  | Class I                                     |
| Adhesion strength by pull-off test:                                   | ≥ 2.0N/mm <sup>2</sup>                      |
| Fire Classification: <sup>4)</sup>                                    | E <sub>fl</sub>                             |

<sup>1)</sup> Last two digits of the year in which the marking was affixed.

<sup>2)</sup> tested as part of system build-up Sikafloor-161 / Sikafloor-350 N Elastic / Sikafloor-359 N.

<sup>3)</sup> Please refer to the Sikafloor Chemical Resistance Chart.

<sup>4)</sup> Min. classification, please refer to the individual test certificate.

#### EU REGULATION 2004/42

#### VOC - DECOPAINT DIRECTIVE

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / j type **sb**) is 500g/l (Limit 2010) for the ready to use product.

The maximum content of **Sikafloor®-359** is < 500g/l VOC for the ready to use product.

### FOR MORE SIKAFLOOR®-359 N INFORMATION:



#### Sika (NZ) Limited

Flooring

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Asia Pacific | NZ

Flooring