BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

Sikafloor®-2002

CLEAR EPOXY RESIN BINDER AND TOP COAT

PRODUCT DESCRIPTION

Sikafloor®-2002 is a two-component, high solids, low VOC, low odour, water clear, high gloss epoxy resin formulated to offer excellent aesthetic properties. Typically applied as the standard clear binder and top coat for multicoloured, decorative systems such as Sikafloor® Quartzite®, Sikafloor® DecoFlake® and Sikafloor® Metallic FX® Systems.

WHERE TO USE

Sikafloor®-2002 may only be used by experienced professionals.

Sikafloor®-2002 is typically used in light to heavy traffic areas such as:
- Hospitals, health care facilities
- Retail spaces (e.g. shopping malls, grocery stores)
- Manufacturing facilities and warehouses
- Commercial kitchens
- Laboratories, life sciences, pharmaceutical industries
- Leisure and culture (e.g. museums and stadiums)
- Offices and government buildings

CHARACTERISTICS / ADVANTAGES

- Durable, impermeable and seamless surface
- Superior clear aesthetic finish
- Low VOC content and low odour
- Superior mechanical and chemical resistances
- Fade resistant
- Easily cleaned and maintained
- Does not support growth of bacteria or fungus
- Highest performance rating according to ASTM G21 resistance to fungi and ASTM D3273 resistance to mold growth (special order grade)

ENVIRONMENTAL INFORMATION

Conformity with LEED® v4 MRc 2 (Option 1): Building Product Disclosure and Optimization – Environmental Product Declarations
Conformity with LEED® v4 EQc 2: Low-Emitting Materials

APPROVALS / CERTIFICATES

Meets the requirements of CFIA and USDA for use in food plants

PRODUCT INFORMATION

CSC MasterFormat®	**09 67 00 | FLUID-APPLIED FLOORING**		
Packaging	Component A:	6.67 L (1.76 US gal.)	20 L (5.28 US gal.)
	Component B:	3.33 L (0.88 US gal.)	10 L (2.64 US gal.)
	Components A+B:	10 L (2.64 US gal.)	30 L (7.92 US gal.)
Shelf Life	2 years in original, unopened packaging under proper storage conditions.		

Storage Conditions	Store dry at temperatures between 5 °C to 32 °C (41 °F to 89 °F) and protect from freezing. If frozen, consult Sika Canada. Condition product at temperatures between 18 °C to 30 °C (65 °F to 86 °F) before use.	
Appearance / Colour	Clear	
Viscosity	~292 cps (mixed)	(ASDTM D2196)
Volatile organic compound (VOC) content	< 25 g/L	

TECHNICAL INFORMATION

Shore D Hardness	~80	(ASTM D2240)
Abrasion Resistance	~76 mg loss	(ASTM D4060) Taber Abraser, Wheel CS 17/1000g (2.2 lb) / 1000 cycles
Compressive Strength	~49.9 MPa (~7250 psi)	(ASTM C579)
Tensile Strength	~39.5 MPa (~5728 psi)	(ASTM D638)
Modulus of Elasticity in Tension	~1287 MPa (~186 663 psi)	
Elongation at Break	~11 %	(ASTM D638)
Pull-Off Strength	> 2.5 MPa (> 363 psi) (concrete failure)	(ASTM D7234)
Gloss Level	~90 (60 degrees)	(ASTM D523)
Coefficient of Friction	~0.32 Wet (smooth coating) ~0.92 Dry (smooth coating)	(ANSI A326.3) / BOT 3000e
Water Absorption	~0.13 % (2 hours boiling)	(ASTM C413)
Chemical Resistance	Consult Sika Canada	

APPLICATION INFORMATION

Mixing Ratio	A:B =2:1 by volume
Consumption	2 m^2/L to 4 m^2/L (80 ft^2 / US gal. to 160 ft^2 / US gal. (10- 20 mil w.f.t.) **Note:** Actual coverage rates and material consumption will depend upon porosity and profile of substrates. Allowance must be also made for variation in film thickness or number of coats required to achieve complete coverage of surfaces. Test sections are recommended to establish correct coverage.
Product Temperature	Condition product between 18 °C to 24 °C (65 °F to 75 °F)
Ambient Air Temperature	Minimum 10 °C (50 °F) Maximum 30 °C (86 °F).
Relative Air Humidity	Maximum 85% (during application and curing)
Dew Point	Substrate must be at least 3 °C (5 °F) above the dew point to reduce the risk of condensation, which may lead to adhesion failure or “blushing” on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature.
Substrate Temperature	Minimum 10 °C (50 °F) Maximum 30 °C (86 °F). Mixing and application attempted at material, ambient and/or substrate temperature conditions less than 18 °C (65 °F) will result in a decrease in product workability and slower cure rates.

Substrate Moisture Content

Moisture content of concrete substrate must be ≤ 4 % (pbw – part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter on mechanically-prepared surface according to this product data sheet (preparation to ICRI / CSP 3 - 4). If moisture content of concrete substrate exceeds 4 % (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter, use Sikafloor®-1610 or Sikafloor®-81 EpoCem®CA or Sikafloor® 22NA or 24 NA PurCem®.
When relative humidity tests for concrete substrate are conducted per ASTM F2170 for project specific requirements, values must be ≤ 85 %. If values exceed 85 % according to ASTM F2170, use Sikafloor®-1610 or Sikafloor®-81 EpoCem®CA or Sikafloor® 22NA or 24 NA PurCem®. ASTM F2170 testing is not a substitute for measuring substrate moisture content with a Tramex® CME/CMExpert type concrete moisture meter as described above.
Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapour drive at the time of application. Refer to ASTM D4263, may be used for a visual indication of vapour drive.

Pot Life

Material Temperature	Time
10 °C (50 °F)	~50 minutes
20 °C (68 °F)	~25 minutes
30 °C (86 °F)	~15 minutes

Curing Time

Substrate Temperature	Foot Traffic	Light Traffic	Full Cure
10 °C (50 °F)	~24 hours	~3 days	~10 days
20 °C (68 °F)	~8 hours	~2 days	~7 days
30 °C (86 °F)	~6 hours	~36 hours	~4 days

Curing times will vary according to air and substrate temperatures and relative humidity.
Freshly applied material should be protected from dampness, condensation and water for at least 72 hours.
Mechanical, chemical and physical properties will be fully achieved at full cure.

Waiting Time / Overcoating

Substrate Temperature	Minimum	Maximum
10 °C (50 °F)	~24 hours	~36 hours
20 °C (68 °F)	~8 hours	~24 hours
30 °C (86 °F)	~6 hours	~24 hours

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

LIMITATIONS

- Prior to application, measure and confirm the following: substrate moisture content, ambient relative humidity, ambient and surface temperature and dew point. During installation, confirm and record above values at least once (1) every three (3) hours, or more frequently whenever conditions change (e.g. ambient temperature rise/fall, relative humidity increase/decrease, etc.).
- Do not apply Sikafloor® to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikafloor® product after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult with design professional prior to use.
- Any aggregate used with Sikafloor® systems must be non-reactive and oven-dried.
- This product is not designed for negative side waterproofing.
- Typically not recommended for exterior slabs on grade where freeze/thaw conditions may exist.

- Not suitable for exterior direct sunlight exposure; use for interior walls and floors only.
- Direct-fired gas or kerosene heaters produce by-products that can have adverse effects on the curing product. To avoid this occurrence, heaters must be exhausted to the exterior of the building to avoid defects such as amine blush, whitening, loss of adhesion or other surface deficiencies.
- Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface imperfections and other defects.
- Published Dynamic Coefficient of Friction (DCOF) wet and dry test results are approximate values based on laboratory test samples produced in a controlled environment following the application instructions published on the product data sheet. Resin flooring products are hand applied finishes subject to minor variations in surface texture due to influences partly beyond Sika Canada's control. Substrate profile, environmental conditions, variable regional aggregate size, shape and gradation, aggregate distribution, uniformity of applied resin mil thickness, and application technique can all affect the final DCOF test results achieved. Adequate provision should be made by the client throughout the selection and installation process to ensure the finished surface texture meets the end user's traction requirements.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Concrete surfaces must be clean, sound and dry. Remove all dust, dirt, existing paint films, efflorescence, exudates, laitance, form oils, hydraulic or fuel oils, brake fluid, grease, fungus, mildew, biological residues or any other contaminants which may prohibit good bond. Prepare the surface by any appropriate mechanical means, in order to achieve an open textured profile equivalent to ICRI / CSP 3 - 4. The compressive strength of the concrete substrate should be at least 25 MPa (3625 psi) at 28 days and a minimum of 1.5 MPa (218 psi) in tension at the time of application of Sikafloor®-2002.

MIXING

Mix Ratio: A:B = 2:1 by volume
Do not hand mix Sikafloor® materials. Mechanically mix only.
Pre-stir Components A and B separately, making sure all solids, are evenly distributed and uniform consistencies are achieved within each individual Component. Empty Component B (Hardener) in the correct mix ratio into Component A (Resin) or empty Component A into a suitably sized and clean pail and add Component B in the correct ratio. Blend the combined components thoroughly at low speed (300 - 450 rpm) for at least three (3) minutes using a drill fitted with an Exomixer® or Jiffy type paddle suited to the dimensions of the mixing container. Keep the mixing paddle in the mix to minimize entrapped air. Take care not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and
bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing. When completely mixed, Sikafloor®-2002 should be uniform in colour and consistency.
Do not mix more material than can be applied within the working time limits (i.e. Pot Life) at the actual field temperature.

APPLICATION

Apply Sikafloor®-2002 using a non-marking squeegee or flexible steel trowel, followed by backrolling to provide a uniform texture and appearance. Over-rolling and or late back rolling may cause bubbling and leave roller marks. A second top coat application or a thicker initial application maybe required to achieve a specific texture or desired final appearance. Sika Canada strongly recommends that a test area be applied to confirm specific top coat selection and application rates required to produce the desired final appearance.
Note: If the Waiting/ Recoat time has passed (refer to Technical Data section) the previous coat must be lightly sanded, to remove all gloss; vacuum cleaning and solvent wiping will be necessary to remove all traces of dust. The surface should be a uniform dullness, with no gloss present after clean-up and before applying the next coat.

CLEAN UP

Clean all tools and equipment immediately with Sika® Epoxy Cleaner. Once cured, product can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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 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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